9110-04-P

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

33 CFR Parts 83, 84, 85, 86, 87, and 88

[Docket No. USCG-2012-0102]

RIN 1625-AB88

Changes to the Inland Navigation Rules

AGENCY: Coast Guard, DHS.

ACTION: Notice of proposed rulemaking.

SUMMARY: The Coast Guard proposes to amend the inland navigation rules and their annexes in 33 CFR parts 83 through 88 to align the regulations with amendments made by the International Maritime Organization to the Convention on the International Regulations for Preventing Collisions at Sea, to which the United States is a signatory, and to incorporate recommendations made by the Navigation Safety Advisory Council. These changes would harmonize domestic and international law by reducing and alleviating equipment requirements on vessels, addressing technological advancements, such as wing-in-ground craft, and increasing public awareness of the inland navigation rules. The changes would also make references to applicable

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requirements easier to locate by using the same format in domestic regulations as is used in the international convention.

DATES: Comments and related material must either be submitted to our online docket via

http://www.regulations.gov on or before [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER] or reach the Docket Management Facility by that date.

ADDRESSES: You may submit comments identified by docket number USCG-2012-0102 using any one of the following methods:

- (1) Federal eRulemaking Portal: http://www.regulations.gov.
 - (2) Fax: 202-493-2251.
- (3) Mail: Docket Management Facility (M-30), U.S. Department of Transportation, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590-0001.
- (4) Hand delivery: Same as mail address above, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The telephone number is 202-366-9329.

To avoid duplication, please use only one of these four methods. See the "Public Participation and Request for Comments" portion of the SUPPLEMENTARY INFORMATION

section below for instructions on submitting comments.

FOR FURTHER INFORMATION CONTACT: If you have questions on this proposed rule, call or e-mail LCDR Megan L Cull, Coast Guard; telephone 202-372-1565, e-mail megan.l.cull@uscg.mil. If you have questions on viewing or submitting material to the docket, call Renee V. Wright, Program Manager, Docket Operations, telephone 202-366-9826.

SUPPLEMENTARY INFORMATION:

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I. Public Participation and Request for Comments

We encourage you to participate in this rulemaking by submitting comments and related materials. All comments received will be posted without change to http://www.regulations.gov and will include any personal information you have provided.

A. Submitting comments

If you submit a comment, please include the docket number for this rulemaking (USCG-2012-0102), indicate the specific section of this document to which each comment applies, and provide a reason for each suggestion or recommendation. You may submit your comments and material online or by fax, mail, or hand delivery, but please use only one of these means. We recommend that you include your name and a mailing address, an e-mail address, or a phone number in the body of your document so that we can contact you if we have questions regarding your submission.

To submit your comment online, go to http://www.regulations.gov, click on the "submit a comment" box, which will then become highlighted in blue. In the "Document Type" drop down menu select "Proposed Rule" and insert "USCG-2012-0102" in the "Keyword" box. Click "Search" then click on the balloon shape in the "Actions" column. If you submit your comments by mail or hand delivery, submit them in an unbound format, no larger than 8½ by 11 inches, suitable for copying and electronic filing. If you submit comments by mail and would like to know that they reached the Facility, please enclose a stamped, self-addressed postcard or envelope.

We will consider all comments and material received during the comment period and may change this proposed rule based on your comments.

B. Viewing comments and documents

To view comments, as well as documents mentioned in this preamble as being available in the docket, go to http://www.regulations.gov, click on the "read comments" box, which will then become highlighted in blue. In the "Keyword" box insert "USCG-2012-0102" and click "Search." Click the "Open Docket Folder" in the "Actions" column. If you do not have access to the internet, you may view the docket online by visiting the Docket Management Facility in

Room W12-140 on the ground floor of the Department of Transportation West Building, 1200 New Jersey Avenue SE, Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. We have an agreement with the Department of Transportation to use the Docket Management Facility.

C. Privacy Act

Anyone can search the electronic form of comments received into any of our dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review a Privacy Act notice regarding our public dockets in the January 17, 2008, issue of the Federal Register (73 FR 3316).

D. Public meeting

We do not now plan to hold a public meeting. But you may submit a request for one to the docket using one of the methods specified under ADDRESSES. In your request, explain why you believe a public meeting would be beneficial. If we determine that one would aid this rulemaking, we will hold one at a time and place announced by a later notice in the <u>Federal Register</u>.

II. Abbreviations

AIS Automated Identification System

CFR Code of Federal Regulations

COLREGS Convention on the International Regulations for

Preventing Collisions at Sea

DHS Department of Homeland Security

DSC Digital Selective Calling

IMO International Maritime Organization NAVSAC Navigation Safety Advisory Council

NBSAC National Boating Safety Advisory Council

NPRM Notice of proposed rulemaking

§ Section symbol

SOLAS International Convention for Safety of Life

at Sea

U.S.C. United States Code WIG craft Wing-in-Ground craft

III. Basis and Purpose

The purpose of this rulemaking is to harmonize existing domestic law with current international law because Coast Guard regulations relating to inland navigation rules are inconsistent with the international standards found in the Convention on the International Regulations for Preventing Collisions at Sea (COLREGS), to which the United States is a signatory. In addition to the alignment with international standards, the Navigation Safety Advisory Council (NAVSAC) recommended several changes to the regulations that would simplify the inland navigation rules and change equipment requirements for certain vessels. The Coast Guard has initiated this rulemaking under the authority of the Coast Guard and Maritime Transportation Act of 2004 (Pub. L. 108-293) and

the Department of Homeland Security Delegation 0170.1, Delegation to the Commandant of the Coast Guard.

IV. Background

In 1972, the International Maritime Organization (IMO) formalized the COLREGS, or international rules. The United States ratified this treaty and adopted the COLREGS in the International Navigation Rules Act of 1977. Ratification of this treaty made all U.S. vessels subject to the COLREGS while operating on international waters. The corresponding rules for inland waters, or inland navigation rules, did not go into effect until Congress enacted the Inland Navigational Rules Act of 1980. The inland navigation rules and the COLREGS are very similar in both content and format.

The IMO has made several amendments to the COLREGS since they were promulgated in 1972. The United States has adopted these amendments through statute until the two most recent IMO amendments in 2001 and 2007. Incorporation of these IMO amendments is one of the purposes of this Notice of Proposed Rulemaking (NPRM).

In 2004, Congress passed the Coast Guard and Maritime Transportation Act of 2004, which, in effect, gave the Secretary of Homeland Security ("the Secretary") the authority to issue inland navigation regulations. The

Secretary further delegated the authority to develop and enforce navigation safety regulations to the Commandant of the Coast Guard through Department of Homeland Security Delegation 0170.1, "Delegation to the Commandant of the Coast Guard."

Through the most recent regulatory change in 2010, the Coast Guard used the authority granted by Congress and delegated by the Secretary to move the inland navigation rules from the United States Code (U.S.C.) to 33 CFR part 83. 75 FR 19544. Regulations in 33 CFR part 83, along with regulations in 33 CFR parts 84 through 88, now comprise the complete domestic inland navigation rules. Movement to the CFR in 2010 effectively ended statutory codification of the inland rules of the road.

Using this authority, the Coast Guard proposes to amend 33 CFR part 83, along with 33 CFR parts 84 through 88, to align U.S. inland navigation rules with the COLREGS as much as practicable and to incorporate other NAVSAC recommendations and Coast Guard changes.

V. Discussion of Proposed Rule

This NPRM proposes many changes to the regulations in 33 CFR parts 83, 84, 85, 86, 87, and 88 that would preempt State and local law regarding inland navigation, make current regulations more consistent with international

standards, and make other NAVSAC recommended changes, including mandating the use of other electronic equipment, such as AIS, if outfitted, and allowing certain small vessels to use an all-round white light in addition to the currently approved electric torch or lighted lantern. Many of these changes would reduce the regulatory burden on mariners. The proposed changes are described below.

A. Preemption of State and local law language added to the Application section at 33 CFR 83.01(a).

On May 20, 2009, President Obama issued a memorandum entitled "Preemption" to the heads of executive agencies.

The purpose of this memorandum was to ensure that "preemption of State law by executive departments and agencies should be undertaken only with full consideration of the legitimate prerogatives of the States and with a sufficient legal basis for preemption." The memorandum also required agencies to include preemption provisions in the codified regulations when regulatory preambles discussed its intention to preempt State law through the regulation. Furthermore, it directed that these preemption provisions must be justified under the legal principles governing preemption, including those outlined in EO 13132. (this memorandum is available for viewing in the rulemaking docket by following the instructions under the

"Public Participation and Request for Comments" section of this preamble).

In 33 U.S.C. section 2071, Congress specifically granted to the Secretary the authority to "issue inland navigation regulations applicable to all vessels upon the inland waters of the United States and technical annexes that are as consistent as possible with the respective annexes to the International Regulations." Because this authority is expressly granted by Congress to the Secretary, State and local laws are preempted by Federal law. Therefore, based on the President's 2009 memo and the preemption principles outlined in EO 13132, the Coast Guard proposes to add the following sentence to 33 CFR 83.01(a): "The regulations in this subchapter have preemptive effect over State or local regulation within the same field."

B. All provisions of 33 CFR part 85, Annex II, and

33 CFR part 88, Annex V, would be moved into the main body

of 33 CFR part 83.

Prior to 2010, the inland navigation rules were located in statute. The Coast Guard promulgated five annexes through regulation, to be read in conjunction with the inland navigation statute. These annexes correspond to COLREGS annexes. Because the inland navigation rules have become regulation, NAVSAC recommended that sections of

Annex V be relocated to the main regulation text.

Additionally, the Coast Guard proposes to relocate the provisions of Annex II to the main regulation text.

We propose to move these provisions without substantive change to the appropriate sections in part 83. Reorganizing the Annex II and Annex V provisions to be found in part 83 would ease compliance and simplify the study of the rules. As a result of moving the provisions of these annexes to part 83, paragraph (d) in section 83.26 must be removed and reserved. This paragraph speaks to the provisions of Annex II that have now been moved to part 83. Additionally, for clarity, the appropriate paragraphs of Rule 26 must be added to new paragraph (f) of section 83.26 in lieu of the more general "these Rules" currently found in the regulation.

Table 1 summarizes the movement of 33 CFR part 85,
Annex II, and 33 CFR part 88, Annex V, provisions to 33 CFR
part 83.

Table 1

Current Section Number and Heading	Proposed Section Number and
	Paragraph
85.1 General.	83.26(f)
85.3 Signal for trawlers.	
85.5 Signal for purse seiners.	
88.05 Copy of rules.	83.01(g)
88.09 Temporary exemption from	83.20(f)
light and shape requirements when	
operating under bridges.	
88.11 Law enforcement vessels.	83.27(i)

88.12 Public safety activities.	83.27(j)
88.13 Lights on moored barges.	83.24(k) through (p)
88.15 Lights on dredge pipelines.	83.24 (q)

There would no longer be any provisions in part 85,

Annex II, or part 88, Annex V, except for provisions

reserving these parts for any future amendments that may

require their use. To this end, the general purpose and

applicability provisions of parts 85 and 88 would be

reserved. This would be done by removing all regulations

from this part and reserving the first sections only as a

placeholder. Therefore, 33 CFR 85.1 would be redesignated

as § 85.01, and § 85.01 would then be reserved, along with

§ 88.01.

C. <u>COLREGS amendment language and terms would be</u> aligned with international rules at 33 CFR part 83.

In 2001 and 2007, the IMO adopted several amendments to the COLREGS through Resolution A.910(22) and Resolution A.1004(25), respectively. NAVSAC recommended that, in the interests of uniformity and simplification for mariners, and to continue encouraging compliance with the COLREGS, the Coast Guard should adopt these amendments in regulation. The amendments that NAVSAC recommended and the Coast Guard proposes are as follows:

1. The IMO incorporated the term "Wing-In-Ground (WIG)

craft" into several sections of the COLREGS and added requirements applicable to this type of craft. The following sections in part 83 would be amended to add this term and/or its definition or add requirements applicable to WIG craft: §§ 83.03(a), 83.03(m), 83.18(f), 83.23(c), and 83.31. These additions specify how WIG craft should operate around other vessels, including when taking off, landing, and when in flight, as well as lighting requirements specific to WIG craft. Current WIG craft operations are limited to prototype testing, feasibility studies, and other limited activities. However, the specific construction, design, and operation of WIG craft pose unique risks that we are trying to address while also conforming to the IMO standard.

2. The IMO modified COLREGS sound signal equipment requirements for vessels based on size. One amendment removes the requirement for a bell on a vessel of 12 meters or more in length but less than 20 meters in length. The other amendment reduces the regulatory restrictions placed on the characteristics of whistles allowed for vessels of specific lengths. The Coast Guard would add the same language to §§ 83.33(a) and 83.35(i). We would also amend the existing language in part 86, subpart A. This language consists of amendments that IMO believes cater to smaller

vessels since these amendments provide regulatory

flexibility for sound signal requirements. We concur- by

following IMO's example, we also would be decreasing the

regulatory burden for small vessels by allowing sound

options without negatively impacting navigation safety.

- The IMO amended existing sections of COLREGS to 3. incorporate new formulas and new standards. Sections 84.13(a), 84.13(b), 86.01(a), 86.01(c), 86.02(b) and the Table in 86.01 would be partially amended to align with the new COLREGS language. Sections 84.13(a) and 84.13(b) would be amended to account for the vertical separation of masthead lights on high-speed craft. These amendments incorporate new formulas to accommodate novel designs in the trim and resulting masthead placement of these specific types of crafts. By changing these formulas, the masthead light would be more visible, thereby increasing the safety of these vessels. In section 86.01 and 86.02, we would amend the frequency and range of audibility standards to relax the requirements for sound pressure levels and octave bands. We believe that the safety of vessels is not measurably impacted by the differing standards and that aligning domestic regulations with the international standard eases compliance.
 - 4. The IMO amended COLREGS Rule 8, paragraph (a),

which corresponds to § 83.08(a), and which generally governs actions taken to avoid collision, by adding the requirement that such actions "be taken in accordance with the Rules of this part." The IMO added this language to make clear that any action to avoid collision should be taken in accordance with the relevant rules in the COLREGS, and to link Rule 8 with the other navigation rules. We propose to amend § 83.08(a) to include this revised language.

5. The IMO modified COLREGS distress signal requirements to update technologies in its list of acceptable equipment. Section 84.01(d), (1), and (m) would be amended to eliminate radiotelegraph or radiotelephones alarms as approved distress calls, with the exception of SOS, which may be transmitted via any means. Radiotelephones can still be used, but not the radiotelephone alarm function. There are no costs associated with removing the alarms as approved distress calls because this change does not require the replacement of such equipment. Radiotelegraphs are obsolete and are no longer used by the industry.¹ This change was made to the International Convention for Safety of Life at Sea (SOLAS) Chapter V in 1999. It was also instituted domestically by

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¹ http://www.gpo.gov/fdsys/pkg/FR-1995-01-27/pdf/95-2092.pdf

the Federal Communications Commission in the 1990s and has been in effect since then. This change also expands the list of approved equipment for emergency calls to include Digital Selective Calling (DSC), Inmarsat, and other mobile satellite service provider ship earth stations but does not require carriage of such equipment.

The search and rescue manual reference in paragraph 3 has also been updated. There is no cost to the change in reference because there is no requirement to purchase the manual.

6. Rule 24 of the COLREGS provides lighting and shape requirements for partially submerged vessels or objects being towed, or a combination thereof. In review of our regulations, the lighting and shape requirements for towed combinations were omitted. We propose to add this language to match the COLREGS.

There would be no additional requirements on mariners imposed by the additions and amendments in 1 through 6 above. Instead, these sections would conform to the international standards and provide more options for vessel equipment compliance and increase the clarity of these requirements.

D. NAVSAC recommended change.

NAVSAC recommended a change to the existing inland

navigation rules in which § 83.07(b) would be amended to add the words "and other electronic" following the word "radar." The Coast Guard agrees. In 2003, we published a final rule mandating the use of Automatic Identification Systems (AIS) on a large number of seagoing vessels. use of AIS is also a SOLAS requirement. Therefore, adding the words "and other electronic" equipment to this section would be consistent with the AIS final rule by requiring vessels that are otherwise required to have an AIS to use the system for collision avoidance in accordance with inland navigation rules. No additional equipment is required by vessels as a result of this change. Those vessels required by 33 CFR 164.46, or those electing to carry, an AIS are instructed to utilize this tool for collision avoidance purposes. This description would also allow for future development and use of technology that would meet Coast Guard requirements.

E. <u>"Exhibit an all-round white light" would be added</u> to 33 CFR 83.25.

The National Boating Safety Advisory Committee (NBSAC) proposed several options to the Coast Guard to reduce the risk of vessel collisions. One of the options that NBSAC proposed was to enhance the visibility of smaller vessels and sailing vessels. NAVSAC agreed with the NBSAC proposal

and recommended that the Coast Guard add the option of using an all-round white light as a means for vessels of less than 7 meters or vessels under oars to advertise their position and help prevent collisions. Therefore, in § 83.25(d)(1) and (2), we propose to add the following phrase as an option for lighting: "exhibit an all-round white light or."

F. Proposed removal of the contradictory paragraph (c) in 33 CFR 83.26.

In current 33 CFR 83.26, which concerns lights on vessels engaged in fishing other than trawling, there are two contradictory paragraphs, both of which are labeled as paragraph (c). The second paragraph (c) is the correct version and would remain in this section. We propose to remove the contradictory paragraph (c), currently appearing first in the regulations, to avoid confusion or inability to choose the correct lighting and shapes.

G. Clarifying language added to 33 CFR 83.01 to enumerate appropriate authorities.

In Rule 1, section 83.01, paragraph (b)(i), we propose to add the following after Regulations: "for Preventing Collisions at Sea, 1972, including annexes currently in force for the United States ("International Regulations")." This language would clarify what international regulations

we are referring to throughout the regulation.

H. <u>Non-substantive changes to numbering or citing to reflect additions, amendments, and/or to conform to COLREGS</u> cites.

Based on the movement of some provisions, addition of new terms, and for ease of reference in locating applicable rules, several proposed changes would involve re-numbering or correcting cites in 33 CFR parts 83 through 88.

Sections 83.03(n) through 83.03(r) and 83.23(d) through 83.23(e) would be re-lettered following the insertion of the WIG craft language. Section 83.35(j) and 83.35(k) would be re-lettered following the insertion of additional vessel applicability language.

Section 83.24(c) would be amended to reference the correct cite to (i) instead of (1). Paragraph (b) in § 83.08 would be amended to add "and/" after "course" in both instances so as to correspond to COLREGS language.

To correspond to COLREGS numbering, § 83.18(d) would be reserved, thereby requiring the current paragraph (d) to be re-lettered as (e). Sections 83.03(h), 83.26(g)(ii)(2), and 83.35(d) are also reserved to correspond to COLREGS which also necessitate changes in paragraph lettering.

Parts 84 through 88, collectively the annexes, would be re-numbered in their entirety to correspond to the

COLREGS numbering system because all inland navigation rules have been moved into the CFR. Two of the annexes, parts 85 and 88, would be reserved for use at a later date because the provisions of these annexes would be moved to part 83. Citations to the applicable annexes would be added to the following for easy reference: §§ 83.22, 83.27, 83.32, 83.33, 83.34, 83.37, and 83.38.

In addition to the other non-substantive changes, numbers would be replaced with roman numerals, lists would begin with lowercase letters, headings would be removed, and terms in the definition sections would be italicized instead of using quotations to model the domestic format after the international format. The format changes are necessary to reduce confusion for the maritime community by making the domestic and international rules uniform.

Additionally, the non-substantive changes would make for easy reference of the domestic and international rules because the numbering scheme would be identical to the extent practicable.

VI. Regulatory Analyses

We developed this proposed rule after considering numerous statutes and executive orders related to rulemaking. Below, we summarize our analyses based on 14 of these statutes or executive orders.

A. Regulatory Planning and Review

Executive Orders 12866 ("Regulatory Planning and Review") and 13563 ("Improving Regulation and Regulatory Review") direct agencies to assess the costs and benefits of available regulatory alternatives and, if regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety effects, distributive impacts, and equity). Executive Order 13563 emphasizes the importance of quantifying both costs and benefits, of reducing costs, of harmonizing rules, and of promoting regulatory flexibility and further requires agencies to adapt rules that are outdated or outmoded. This rule does that, removing contradictory language, expanding options for compliance, allowing for new technologies and removing outdated equipment from our regulations. This NPRM has not been designated a "significant regulatory action" under section 3(f) of Executive Order 12866. Accordingly, the NPRM has not been reviewed by the Office of Management and Budget. A draft regulatory assessment follows:

As stated in section <u>V. Discussion of Proposed Rule</u> of this preamble, this NPRM would update existing regulations to those of COLREGS, incorporate provisions suggested by NAVSAC, and add language regarding federalism, based on

President Obama's 2009 memo and EO 13132. The proposed regulations fall under two categories: harmonizing and discretionary. Harmonizing changes include provisions associated with the Presidential memo and COLREGS.

Discretionary provisions are those recommended by NAVSAC.

Alternatives Considered

Alternative 1 — No Action. We rejected this alternative, as this alternative would ensure that the current differences between the domestic and international navigation rules continue, creating potential navigational errors and potential for mishaps, and would not be consistent with the Coast Guard's commitment to conform the inland navigation rules with the COLREGs as much as practicable. The proposed alternative incorporates regulations that are less stringent than the current regulations while maintaining the benefits of the current regulations.

Alternative 2 — Incorporation of burden increasing NAVSAC recommendations. Alternative 2 would include all the changes in the proposed alternative and two additional changes recommended by NAVSAC. Those additional changes, which would increase the burden on the regulated community and expand the affected population, are as follows:

- 1. Lighting of gas pipelines (33 CFR 88.15). A 1991
 NAVSAC resolution proposed lighting gas pipelines in a
 manner similar to that done with dredge pipelines as
 described in 33 CFR 88.15. However, the Department of
 Transportation's Pipeline and Hazardous Material Safety
 Administration has since published regulations affecting
 some of the gas pipelines that necessitated the original
 NAVSAC resolution. Additional study is now needed to
 determine if current regulations have effectively decreased
 the number of incidents and whether further Coast Guard
 regulatory action is required.
- 2. The requirement that vessels greater than 16 feet must carry the inland navigation rules booklet. This provision would expand the population of vessels that must carry a copy of the inland navigation rules from vessels 12 meters (approximately 39.37 feet) or more in length to vessels more than 16 feet long. The Coast Guard rejects this recommendation due to a lack of quantifiable benefits to justify a high regulatory burden on recreational vessels at this time.

Summary of the Proposed Rule

Vessels affected by this proposed rule would be vessels traveling on inland waters of the United States. At this time, we anticipate a small additional cost for

future WIG craft to install a light. We estimate that there would not be additional costs or burden from the other harmonizing or discretionary provisions. A benefit of the harmonizing provisions is complying with COLREGS and the Presidential memo,. Both harmonizing and discretionary provisions would also provide regulatory flexibility to certain vessels. Some of the discretionary changes may help to reduce risk of collision. A summary of the Regulatory Analysis is provided in Table 2.

Table 2. Summary of the Regulatory Analysis

Table 2. Summary of the Regulatory Amarysis				
_	Summary			
	(Discretionary)			
All vessels traveling	All vessels			
on inland waters.	traveling on			
	inland waters.			
Certain subgroups of				
vessels (refer to	Certain subgroups			
Table 3 for details)	of vessels (refer			
	to Table 3 for			
	details)			
Costs:	Costs: \$0			
\$112 annual				
\$1,119 10-year total.				
Cost savings:				
\$271,642 annual				
\$2.72 million 10—year				
total.				
Compliance with the	Incorporation of			
COLREGS and	NAVSAC and NBSAC			
Presidential memo.	recommendations.			
Increased regulatory	Increased			
flexibility of	regulatory			
regulations to	flexibility of			
certain vessels.	regulations to			
	certain vessels.			
	Reduction of risk			
	of collision for			
	certain vessels.			
	Summary (Harmonization) All vessels traveling on inland waters. Certain subgroups of vessels (refer to Table 3 for details) Costs: \$112 annual \$1,119 10-year total. Cost savings: \$271,642 annual \$2.72 million 10-year total. Compliance with the COLREGS and Presidential memo. Increased regulatory flexibility of regulations to			

^{*} Cost savings are uncertain. Our estimate illustrates the maximum cost savings that industry would receive.

Affected Population

This proposed rule would affect vessels on inland waters of the United States. Some of the provisions in this proposed rule would affect specific subgroups of these vessels. Population groups and subgroups affected by this proposed rule are listed in Table 3.

Table 3. Breakdown of Affected Populations by Provision Type

Affected by Harmonization	Affected by Discretionary
Provisions	Provisions
Vessels on inland waters.	Vessels on inland waters.
Subgroups	Subgroups
• WIG craft. ²	• Sailing vessels of less
 Vessels of 12 meters or more, but less than 20 meters in length. 	than 7 meters in length. • Vessels under oars.
 New high-speed vessels of 50 meters or more in length. 	• Fishing vessels (non-trawling).
• Vessels less than 75 meters.	
 Vessels 20 meters or more in length. 	
 Vessels equipped with radiotelephone alarms or radiotelegraph alarms 	
 Partially sunken vessels and objects being towed in combination. 	

and this website dedicated to the discussion of WIG craft: http://www.se-technology.com/wig/index.php

² Wing-in-Ground craft are low-flying vehicles that use air pressure between the wing of the craft and the Earth's surface to create lift. While it is capable of flight, given the low altitude in which a WIG craft flies, it was incorporated by IMO (and consequently, US regulations) as a vessel. For more information regarding WIG craft, please refer to the IMO website: http://www.imo.org/ourwork/safety/regulations/pages/wig.aspx

Summary of the Impacts of the Proposed Rule on Affected Populations

This proposed rule would modify various sections of 33 CFR parts 83 through 88 to align domestic regulations with COLREGS, as much as practicable, and to incorporate NAVSAC recommendations. In Table 4, we provide a summary of the impacts, grouped by provision type and then affected population. Please refer to the regulatory text for specific changes.

Table 4. Summary of Impacts of the Proposed Rule on the Affected Populations

Section(s) an	Section(s) and Descriptions		Costs and Benefits	
Harmonizing prov	Harmonizing provisions			
Presidential Mem	10			
§ 83.01(a)	States that vessels must comply with this proposed rule and that this proposed rule preempts state and local laws.	All vessels.	Cost: \$0 Vessels already comply with the federal regulations. There are no state laws that conflict with the federal regulations. Benefit: Clarifies federalism and adheres to the Presidential memo.	
Alignment with C	COLREGS			
§ 83.03(a) § 83.03(m) § 83.18(f) § 83.23(c) § 83.31	Provides operational and lighting requirements for WIG craft when operating on water.	WIG craft.	Cost: \$1,119 To install an all-round red light. Benefit: Conforms with COLREGS.	
§ 83.08(a)	Adds the phrase	All vessels.	Cost: \$0	

	to read as, "[Any action taken to avoid collision] shall be taken in accordance with the Rules of this part and shall"		All vessels must comply with existing regulations. There are no additional costs to the modified regulations in this part. Benefit: Conforms with COLREGS.
§ 83.33(a) Part 86, subpart B	Removes the need for a bell.	New vessels 12 meters or more in length, but less than 20 meters in length.	Cost Savings: \$299 per vessel, \$2.72 million over 10 years. Benefits: More lenient requirement. Conforms with COLREGS.
§ 83.35(i)	If the vessel is equipped with a bell and the bell is used, the sound must be made at 2-minute intervals	New vessels 12 meters or more in length, but less than 20 meters in length.	Cost: \$0 Applies to the use of existing bells. The use of bells is optional. Benefits: Reduces risk of collision if proper sound signal is used during reduced visibility. Conforms with COLREGS.
§ 84.13 § 84.24	Allows an optional modification to the masthead lighting. Moves section to 33 CFR 84.13	New high- speed vessels of 50 meters or more in length.	Cost: \$0 Does not require additional lights or modifications to existing lights. Benefits: Makes lighting requirements more lenient. Accommodates new vessels with novel designs. Conforms with COLREGS.

Part 86,	Expands the	Vessels of	Cost: \$0
1 · · · · · · · · · · · · · · · · · · ·	_	less than 75	I -
subpart A	acceptable		Does not require
	range for	meters in	vessels to buy a
	fundamental	length.	new whistle.
	frequencies.		D 6'11 7
	Vessels have		Benefits: less
	the option of		stringent
	purchasing a		standards allows
	greater range		for greater
	of whistles		options of
	with different		whistles for new
	ranges than		vessels. Conforms
	previously		with COLREGS.
	allowed.		
	Reduces the		
	required		
	frequencies for	Vessels of	
	vessels of 20	20 meters or	
	meters or	more in	
	greater.	length.	
33 CFR Part 87	Radiotelegraph	Vessels	Cost: \$0
	and	equipped	Radiotelegraphs
	radiotelephone	with	are obsolete. ³
	alarms would no	radiotelepho	Radiotelephones
	longer be	ne alarms or	can be used, but
	accepted as	radiotelegra	not their alarms.
	approved	ph alarms.	Does not require
	distress calls.	-	equipment
			replacement.
	Adds Digital		_
	Selective		Benefit: Updates
	Calling,		the list of
	INMARSAT, and		approved distress
	other mobile		signal equipment
	satellite		to incorporate the
	service		latest
	provider ship		technologies.
	to Earth		Conforms with
	stations.		COLREGS.
Part 83.24(g)	Partially	Partially	Cost: \$0
	sunken vessels	submerged	Lighting and shape
	and objects	vessels and	requirements for
	being towed in	other	partially
	combination.	objects	submerged vessels
		being towed,	or other objects
		in	are already
		combination,	outlined. This

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³By 1995, the Coast Guard considered telegraphs to be obsolete. http://www.gpo.gov/fdsys/pkg/FR-1995-01-27/pdf/95-2092.pdf

§ 83.03(m) - (q) § 83.08(a) § 83.09 § 83.18(d) § 83.18(e) § 83.20(e) § 83.23(c) - (d)	Renumbers or moves regulations without substantive changes in order to align	would comply with lighting and shape requirements	requirements if towing more than one at a time. Benefits: Conforms with COLREGS. Cost: \$0 Changes include removal of headings, moving sections to other locations, or renumbering.
§ 83.24(c)(1) § 83.35(i)-(j) Part 84-ANNEX I § 85-ANNEX II	text with that of COLREGS.		Provides no additional requirements to industry.
Part 86-ANNEX III Part 87-ANNEX IV Part 88-ANNEX V			Benefits: Adherence to COLREGS formatting. Simplifies use between COLREGS
\$ 88.03 \$ 88.05 \$ 88.09 \$ 88.11 \$ 88.12			and the CFR.
§ 88.13 § 88.15			
Discretionary Pr	ovisions		
§ 83.07(b)	Vessels with navigation technology must use it for collision avoidance purposes	All vessels	Cost: \$0 Current industry practices already use these types of navigational equipment. Does not require the purchase of additional equipment.
			Benefit: Expands option of auxiliary navigational equipment. If equipment is installed and

			used, it can reduce risk of collision. Incorporates NAVSAC recommendations.
§ 83.25(d)	Allows the optional use of an all-round white light.	Sailing vessels of less than 7 meters in length. Vessels under oars.	Cost: \$0 Vessels can use additional lighting in the form of an all-round white light. Does not require the purchase of additional equipment. Benefits: Allows for more lighting options for better visibility. Incorporates NAVSAC and NBSAC recommendations.
§ 83.26(c)	Removes contradictory requirement. Provides clear standard.	Fishing vessel (non- trawling).	Cost: \$0 Removes contradictory statement. Benefit: Provides a clear standard.

Costs

As stated in section <u>III. Basis and Purpose</u> of this preamble, the primary purpose of this proposed rule is to harmonize existing domestic law with the current international law.

Most of the provisions harmonize the CFR with COLREGs by moving sections to different locations, renumbering, or

reformatting⁴. There are six changes to COLRREGS that affect specific vessels. The first change incorporates WIG craft into the population of affected vessels. The second change removes the need for a bell, particularly for new vessels of 12 meters or greater, but less than 20 meters. The third COLREGS provisions modify sound requirements for certain vessels. The fourth change modifies the formula for lighting requirements for high-speed vessels. The fifth significant COLREGS provision removes radiotelegraphs and radiotelephones as approved equipment for distress calls. The sixth and final change adds language about the combination of partially submerged vessels.

A more detailed description of these changes is outlined in the following paragraphs. One other harmonizing change adds a preemption provision explaining that the codified regulation preempts state or local law within the same field. This provision complies with the Presidential memorandum and EO 13132, which requires executive agencies to ensure that its preemption statements have a sufficient legal basis and to make explicit in the codified regulation its intention to preempt State law, but does not change the compliance standards for vessels.

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⁴ International Maritime Organization. *Convention On the International Regulations For Preventing Collisions at Sea*, 2003 (Consolidated Edition 2003). www.imo.org.

1. Wing-in-Ground (WIG) Craft. As stated in the preamble of this NPRM, there are ongoing prototype and feasibility testing in the United States for WIG crafts. While we do not have any information as to the success rate of these tests, we assume that even prototype versions may be tested on inland waters or that some of them would successfully pass testing.

Given the existence of prototype testing and the possibility of one being successful, we estimate that there may be one new vessel operating on inland waters in any given year. Assuming that there may be one WIG craft in any given year, the incremental cost is to install an all-round, high-intensity red light.

We then calculated cost to install the required light for WIG craft masthead light based on the growth rate (one vessel annually), multiplied by the cost of the light (one light required per vessel), and determined that this section of the proposed rule would provide a total undiscounted cost of \$1,119.6 Table 5 describes the costs

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⁵ There has been some experimentation in developing WIG craft in some other countries, which would explain the additional language to incorporate WIG craft into regulation. Currently, there are only 3 currently in existence internationally. News regarding the Singaporean-flagged WIG craft: http://www.wigetworks.com/pdf/Press_Release-MV_Airfish_8_Christening_Ceremony.pdf. News regarding the two Korean WIG craft: http://articles.maritimepropulsion.com/article/Wing-in-Gound-Effect-Craft-e28093-Furure-is-Here-Say-Korean-Shipbuilders41727.aspx

⁶ The average cost for an all-round red light is: \$112. The low cost is: \$70 http://www.go2marine.com/item/16246/series-40-all-round-navigation-lights-40004.html?WT.mc id=gb1&utm source=googlebase&utm medium=productfeed&utm campaign=googl

in terms of per vessel, annual savings, and total undiscounted cost.

Table 5. Per vessel, average, recurring, total 10-year undiscounted/Discounted Costs

Future Vessel	Per Vessel	Total 10-year	7%	3% Discounted 10-year
Population	Cost	Undiscounted	Discounted	Cost
(Annual)		Cost	10-year	
			Cost	
1	\$112	\$1,119	\$786	\$954

Note: numbers may not add due to rounding

Table 8 provides the breakdown of cost, both undiscounted and discounted (at 3 and 7 percent rates), over the 10-year period of analysis.

Table 6. Total 10-year Undiscounted and Discounted Costs

Year	Undiscounted	7% Discounted	3% Discounted
		Costs	Costs
Year 1	\$112	\$105	\$109
Year 2	\$112	\$98	\$105
Year 3	\$112	\$91	\$102
Year 4	\$112	\$85	\$99
Year 5	\$112	\$80	\$97
Year 6	\$112	\$75	\$94
Year 7	\$112	\$70	\$91
Year 8	\$112	\$65	\$88
Year 9	\$112	\$61	\$86
Year 10	\$112	\$57	\$83
Total	\$1,119	\$786	\$954
Annualized	\$112	\$112	\$112

2. New vessels of 12 meters or more, but less than 20 meters, in length. One of the provisions in this NPRM removes the need for bells on vessels of 12 meters or more,

<u>eshopping</u>. The high cost is \$153 http://shop.sailboatowners.com/prod.php?5910/Series+32+All-Round+LED+Lights

but less than 20 meters, in length. This means that existing vessels of such length have the option of removing their bells, but are not required to do so. There is no cost to existing vessels since the provision does not require additional equipment or changes, nor does it require the removal of existing equipment. We estimate potential cost savings for new vessels using the assumption that owners would choose to follow this new provision and not install a bell. In other words, our estimate illustrates the maximum cost savings that industry would receive.

In order to estimate the cost savings from not installing bells, we took a high range cost and a low range cost to calculate the average retail price of a bell (\$299) to represent potential costs incurred by the owner should the owner choose to purchase and install a bell. We then estimated the future growth rate based on the build years of vessels listed in the Marine Information for Safety and Law Enforcement database from the years 2008 to 2011.

During this time, 3,628 vessels were built in the 12-20

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⁷ The cost to purchase an 8-inch bell is based on publically available information. Costs range between \$109 and \$489, making the average cost price \$299. Date accessed April 2012. Low cost: http://www.westmarine.com/webapp/wcs/stores/servlet/ProductDisplay?productId=101003&catalogId=10001&langId=-1&storeId=11151&storeNum=50751&subdeptNum=50765&classNum=50766. High cost: http://www.wmjmarine.com/34437.html

⁸ Based on subject matter experts including industry and Coast Guard, manufacturers of recreational vessels do not install bells on the vessels. In order to comply with current regulations, owners would purchase a bell 200 mm in diameter (approx. 8 inches) on the retail market and install it themselves.

meter size range at an average rate of 907 annually (or 0.01 percent of the total population). We then calculated cost savings to industry based on the growth rate, multiplied by the cost of a bell, and determined that this section of the proposed rule would provide a 10-year total undiscounted cost savings of \$2.72 million. Table 7 describes the savings in terms of per vessel, annual savings, and total undiscounted savings.

Table 7. Per vessel (greater than or equal to 12 meters, but less than 20 meters in length), recurring, and total 10-year undiscounted costs

Future Vessel	Per Vessel	Annual	Total 10-year
Population	Cost	Cost	Undiscounted Cost
(Annual)	Savings	Savings	Savings
907	\$299	\$271,642	\$2,716,420

Note: numbers may not add due to rounding.

Table 8 provides the breakdown of cost savings, both undiscounted and discounted (at 3 and 7 percent rates), over the 10-year period of analysis.

Table 8. 10-year Undiscounted and Discounted Rates

		7% Discount	3% Discount
Year	Undiscounted	Rates	Rates
Year 1	\$271,642	\$253,871	\$263,730
Year 2	\$271,642	\$237,263	\$256,049
Year 3	\$271,642	\$221,741	\$248,591
Year 4	\$271,642	\$207,234	\$241,350
Year 5	\$271,642	\$193,677	\$234,321
Year 6	\$271,642	\$181,007	\$227,496
Year 7	\$271,642	\$169,165	\$220,870
Year 8	\$271,642	\$158,098	\$214,437
Year 9	\$271,642	\$147,755	\$208,191
Year 10	\$271,642	\$138,089	\$202,127
Total	\$2,716,420	\$1,907,899	\$2,317,161
Annualized	\$271,642	\$271,642	\$271,642

3. Sound requirements based on the length of a vessel. Other modifications to sound requirements include the usage of a bell on certain vessels, and the relaxation of frequency standards for other vessels. As stated in the paragraphs dealing with cost savings, vessels of 12 meters or more in length are not required to have a bell. Should the owner choose to retain the bell and then decide to use it, the bell must be used at 2-minute intervals.

For whistles used on vessels of less than 75 meters in length, the acceptable range for frequencies would be expanded. This provision does allow for the purchase of whistles that sound in the newly expanded ranges. The required sound pressure levels for vessels of 20 meters or more in length would also be relaxed. Currently, whistles

for these vessels need to project the appropriate sound pressure levels measured at multiple frequency ranges. Our proposed rule would require the whistle to obtain a single minimum sound pressure level, which is based on the vessel's length, and is measured at only one frequency range.

There would be no cost for this provision as this does not require the replacement of an existing whistle as those would still be within the proposed standards. Instead, purchasers of new whistles would have greater whistle options.

4. High-speed Craft. The proposed lighting requirement replaces the established formula for placement of masthead lighting for new, high-speed vessels of 50 meters or greater in length with length to beam ratios greater than 3. This proposed formula, if promulgated would set a lower minimum height for the main masthead light than the current U.S. formula. This modification is needed because wide, high speed vessels often operate with some angle of trim, which makes complying with the original formula onerous. The proposed formula accounts for trim, and aligns U.S. regulation with international standards. We

 $^{^{9}}$ Angle of trim describes the orientation of a vessel with respect to the water. For example, zero trim occurs when the fore and aft drafts are the same.

anticipate that this proposed formula would not change the lighting requirements for existing vessels as the proposed formula is less strict about the height of the masthead (forward and main mast). We also anticipate that this requirement will maintain an equivalent level of safety as that provided by the current formula for mast head height.

5. Radiotelegraphs and Radiotelephones alarms and updates to approved emergency distress call equipment.

Another COLREGS change involves the removal of radiotelegraph alarms and radiotelephone alarms as approved equipment for announcing distress except via Morse Code SOS. This type of equipment is currently obsolete and is no longer used by industry. Also, this change was made in SOLAS V in 1999. It was also instituted domestically by the Coast Guard since the 1990s and has been in effect since then. We found no companies that use this equipment for distress signals. Since no vessel uses this equipment, there is no cost to purchase new equipment and no cost to remove this reference.

6. Partially sunken vessels and objects being towed in combination. Currently, partially submerged vessels or objects being towed must follow certain lighting and shape requirements. This provision would state that any

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¹⁰ http://www.gpo.gov/fdsys/pkg/FR-1995-01-27/pdf/95-2092.pdf

combination of these two items being towed would also need to follow the same lighting and shape requirements. The main intent of this change is to conform with COLREGS.

This provision was listed in COLREGS, but was accidentally left out when the provision was transferred to our regulations. Combinations of towed objects may be lit the same as individual objects. This means there are no additional lighting requirements that exist for combinations that didn't exist for individuals.

Other harmonizing changes to the CFR are non-substantive and simply align current regulations to match the formatting of COLREGS (refer to Table 4 for the summary of these non-substantive changes). Overall, we estimate that the harmonizing provisions of this proposed rule would have no cost to industry.

As noted above, there is a second category of changes being proposed by this NPRM, which recommendations from NAVSAC. These changes represent discretionary actions on the part of the Coast Guard. The recommended changes from NAVSAC allow for the use of additional equipment as a means of reducing risk of collision. Specifically, NAVSAC recommended the optional use of an all-round white light.

NAVSAC also recommended changes to navigation requirements. Vessels would have the option of using the latest

technology in navigational equipment besides radar, requiring that if such equipment is installed, it must be used for collision avoidance. As optional requirements, the Coast Guard anticipates that only those vessel owners/operators that foresee a benefit (safety or otherwise) greater than costs would install such a light.-neither of these costs nor benefits are estimated here. Also, because neither of these changes would require the purchase of new equipment, they do not carry any costs.

One final change proposed by this NPRM is to correct contradictory requirements that currently exist in the CFR regarding the placement of lights. 33 CFR 83.26 Paragraph (c) defines the lights used by a vessel engaged in fishing other than trawling. The first paragraph (c), which was correct in U.S.C. and only was inadvertently changed in 2010 when the Inland Navigation Rules were transferred to CFR, describes the lights for vessels engaged in trawling which are correctly defined in paragraph (b). The second paragraph (c) correctly describes the lights required by vessels engaged in fishing other than trawling. Should vessel owners try to comply with both requirements, there would be no replacement cost because they would be complying with the correct one. In the event that vessel owners were confused as to which paragraph (c) to follow,

we assume that owners would have verified which one by checking COLREGS. Since this change will not require the purchase of additional equipment, but rather reduce confusion in regulation, this change would not require an additional cost burden to vessel owners.

Since the overall impact of this proposed rule is to relax existing requirements on certain vessels, the only cost in this proposed rule is the cost to install an all-round red light on future WIG craft. Since the remaining changes would not involve a change in compliance standards, there are no costs associated with the other requirements.

Benefits

Benefits from harmonizing current inland navigation rules with the COLREGS would be ensuring that the United States, as a signatory to the COLREGS, aligns its domestic regulations as close as practicable to the international standards. Publishing these regulations in the CFR provides greater awareness to the public of changes to the COLREGS and allows for greater public input in terms of its application to inland navigation. Modifying the format and numbering of the regulations to match the formatting and numbering of COLREGS allows for ease of use in terms of referencing either document for requirements.

The more significant COLREGS changes primarily expand current options available for vessels to use, particularly for those dealing with lighting and sound. As a result, vessel owners or operators would find it easier to comply with the proposed regulations than with the existing ones.

Specific benefits from the more significant COLREGS changes are as follows:

- 1. <u>Wing-in-Ground (WIG) Craft.</u> Adding WIG craft to the list of vessels conforms with COLREGS. Given the possibility of future growth, these changes provide WIG craft guidance on navigation and lighting.
- 2. New vessels of 12 meters or more, but less than 20 meters, in length. Vessels of this length no longer need a bell. Not having a bell provides greater regulatory flexibility. If the vessel has a bell, the vessel must use it properly. Proper usage of a bell reduces risk of collision if proper sound signal is used during reduced visibility.
- 3. Sound requirements based on the length of a vessel.

 This change expands the acceptable range for fundamental frequencies, which provides less stringent standards and allows for greater options of whistles for new vessels.
- 4. High-speed Craft. The proposed regulation changes the lighting formula, making lighting requirements more

lenient by accommodating new vessels with novel designs.

This change conforms with COLREGS.

- 5. Radiotelegraphs and Radiotelephones alarms and updates to approved emergency distress call equipment.

 This change provides regulatory flexibility by updating the list of approved distress signal equipment to incorporate the latest technologies and remove outdated ones.
- 6. Partially sunken vessels and objects being towed in combination. Objects being towed must follow certain lighting and shape requirements. Towing multiple or combinations of such vessels and objects would also need to follow the same lighting and shape requirements. This conforms with COLREGS.

This proposed rule also includes benefits from incorporating NAVSAC and NBSAC recommended regulations.

NAVSAC recommended the optional use of an all-round white light. Should owners opt to install an all-round white light to a vessel of less than 7 meters in length or a vessel under oars, the benefit would be greater visibility for that vessel. Greater visibility would reduce the risk of collision, particularly in the period between sunset and sunrise and during periods of reduced visibility.

NAVSAC also recommended changes to navigation requirements, such as requiring vessels to use navigation

technology for collision avoidance purposes. Adopting the requirement to use already installed navigational technology for collision avoidance purposes reduces the risk of a collision.

Finally this NPRM proposes fixing an erroneous, contradictory provision in the regulations. Removing the contradictory paragraph provides a clear standard that vessel owners can follow.

All of these recommendations would provide greater regulatory flexibility as a means of reducing risk of collision.

B. Small Entities

Under the Regulatory Flexibility Act (5 U.S.C. 601-612), we have considered whether this proposed rule would have a significant economic impact on a substantial number of small entities. The term "small entities" comprises small businesses, not-for-profit organizations that are independently owned and operated and are not dominant in their fields, and governmental jurisdictions with populations of less than 50,000.

As discussed in the cost section of this regulatory analysis, the primary purpose of this proposed rule is to align existing domestic law with international law, but there are also discretionary proposals included in this

NPRM. Compliance with both harmonizing and discretionary provisions would not require any additional burden to vessel owners, including small entities. Most harmonizing changes would be made to use consistent formatting between the CFR and COLREGS, which in turn provides ease of use for owners. New vessels would have greater options in terms of lighting modifications, navigation equipment, and sound equipment.

Discretionary changes would also provide greater regulatory flexibility to small entities in terms of allowing the use of optional lighting and additional navigational equipment. We conclude that there would be no additional costs to small entities complying with this proposed rule. There would be a cost savings for vessel manufacturers who would no longer need to install a bell for vessels of equal to or more than 12 meters, but less than 20 meters, in length. The only cost of the proposed rule would be for one new WIG craft a year to install an all-round, high-intensity red light for about \$112.5 Currently, we estimate there are no small entities affected by this proposed rule that plan to operate new WIG crafts.

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⁵ There has been some experimentation in developing WIG craft in some other countries, which would explain the additional language to incorporate WIG craft into regulation. Currently, there are only 3 currently in existence internationally and none in the US. News regarding the Singaporean-flagged WIG craft: http://www.wigetworks.com/pdf/Press_Release-MV_Airfish 8 Christening Ceremony.pdf. News regarding the two Korean WIG craft: http://articles.maritimepropulsion.com/article/Wing-in-Gound-Effect-Craft-e28093-Furure-is-Here-Say-Korean-Shipbuilders41727.aspx.

As there are small costs and a net cost savings associated with this proposed rule, the Coast Guard certifies under 5 U.S.C. 605(b) that this proposed rule, if promulgated, would not have a significant economic impact on a substantial number of small entities. If you think that your business, organization, or governmental jurisdiction qualifies as a small entity and that this rule would have a significant economic impact on it, please submit a comment to the Docket Management Facility at the address under ADDRESSES. In your comment, explain why you think it qualifies and how and to what degree this rule would economically affect it.

C. Assistance for Small Entities

Under section 213(a) of the Small Business Regulatory Enforcement Fairness Act of 1996 (Pub. L. 104-121), we want to assist small entities in understanding this proposed rule so that they can better evaluate its effects on them and participate in the rulemaking. If the proposed rule would affect your small business, organization, or governmental jurisdiction and you have questions concerning its provisions or options for compliance, please consult LCDR Megan Cull by phone at, (202) 372-1565 or via e-mail at Megan.L.Cull@uscg.mil. The Coast Guard will not retaliate against small entities that question or complain

about this rule or any policy or action of the Coast Guard.

Small businesses may send comments on the actions of Federal employees who enforce, or otherwise determine compliance with, Federal regulations to the Small Business and Agriculture Regulatory Enforcement Ombudsman and the Regional Small Business Regulatory Fairness Boards. The Ombudsman evaluates these actions annually and rates each agency's responsiveness to small business. If you wish to comment on actions by employees of the Coast Guard, call 1-888-REG-FAIR (1-888-734-3247).

D. Collection of Information

This proposed rule would call for no new collection of information under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501-3520).

E. Federalism

A rule has implications for federalism under Executive Order 13132, Federalism, if it has a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

It is well settled that States may not regulate in categories reserved for regulation by the Coast Guard. In 33 U.S.C. 2071, Congress specifically granted to the

Secretary the authority to prescribe "inland navigation regulations applicable to all vessels upon the inland waters of the United States and technical annexes that are as consistent as possible with the respective annexes to the International Regulations." As this proposed rulemaking would update existing inland navigation regulations, it falls within the scope of authority

Congress granted exclusively to the Secretary and States may not regulate within this category.

F. Unfunded Mandates Reform Act

The Unfunded Mandates Reform Act of 1995 (2 U.S.C. 1531-1538) requires Federal agencies to assess the effects of their discretionary regulatory actions. In particular, the Act addresses actions that may result in the expenditure by a State, local, or tribal government, in the aggregate, or by the private sector of \$100,000,000 (adjusted for inflation) or more in any one year. Though this proposed rule would not result in such an expenditure, we do discuss the effects of this rule elsewhere in this preamble.

G. Taking of Private Property

This proposed rule would not cause a taking of private property or otherwise have taking implications under Executive Order 12630, Governmental Actions and

Interference with Constitutionally Protected Property Rights.

H. Civil Justice Reform

This proposed rule meets applicable standards in sections 3(a) and 3(b)(2) of Executive Order 12988, Civil Justice Reform, to minimize litigation, eliminate ambiguity, and reduce burden.

I. Protection of Children

We have analyzed this proposed rule under Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks. This rule is not an economically significant rule and would not create an environmental risk to health or risk to safety that might disproportionately affect children.

J. Indian Tribal Governments

This proposed rule does not have tribal implications under Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, because it would not have a substantial direct effect on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes.

K. Energy Effects

The Coast Guard has analyzed this proposed rule under Executive Order 13211, Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use. The Coast Guard has determined that it is not a "significant energy action" under that order because it is not a "significant regulatory action" under Executive Order 12866 and is not likely to have a significant adverse effect on the supply, distribution, or use of energy.

L. Technical Standards

The National Technology Transfer and Advancement Act (15 U.S.C. 272 note) directs agencies to use voluntary consensus standards in their regulatory activities unless the agency provides Congress, through the Office of Management and Budget, with an explanation of why using these standards would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., specifications of materials, performance, design, or operation; test methods; sampling procedures; and related management systems practices) that are developed or adopted by voluntary consensus standards bodies.

This proposed rule does not use technical standards. Therefore, we did not consider the use of voluntary consensus standards.

M. Environment

We have analyzed this proposed rule under Department of Homeland Security Management Directive 023-01 and Commandant Instruction M16475.lD, which guide the Coast Guard in complying with the National Environmental Policy Act of 1969 (42 U.S.C. 4321-4370f), and have made a preliminary determination that this action is one of a category of actions that do not individually or cumulatively have a significant effect on the human environment. A preliminary environmental analysis checklist supporting this determination is available in the docket where indicated under the "Public Participation and Request for Comments" section of this preamble. This rule is likely to be categorically excluded under section 2.B.2, figure 2-1, paragraph (34)(i) of the Instruction and 6(a) of the Federal Register, Vol. 67, No. 141, Tuesday, July 23, 2002, page 48243. This rule involves regulations that are in aid of navigation, such as those concerning the rules of the road, COLREGS, bridge-to-bridge communications, vessel traffic services, and marking of navigation systems. An environmental analysis checklist is available in the docket where indicated under ADDRESSES. We seek any comments or information that may lead to the discovery of a significant environmental impact from this

proposed rule.

List of Subjects

33 CFR Part 83

Navigation (water), Waterways.

33 CFR Part 84

Incorporation by reference, Navigation (water), Waterways.

33 CFR Part 85

Fishing vessels, Navigation (water), Waterways.

33 CFR Part 86

Navigation (water), Waterways.

33 CFR Part 87

Navigation (water), Waterways.

33 CFR Part 88

Navigation (water), Waterways.

For the reasons discussed in the preamble, the Coast Guard proposes to amend 33 CFR Parts 83 through 88 as follows:

Title 33: NAVIGATION AND NAVIGABLE WATERS

1. Revise part 83 to read as follows:

PART 83-RULES

Subpart A-General

Sec.

83.01 Application (Rule 1).

- 83.02 Responsibility (Rule 2).
- 83.03 General definitions (Rule 3).

Subpart B-Steering and Sailing Rules

Conduct of Vessels in Any Condition of Visibility

- 83.04 Application (Rule 4).
- 83.05 Look-out (Rule 5).
- 83.06 Safe speed (Rule 6).
- 83.07 Risk of collision (Rule 7).
- 83.08 Action to avoid collision (Rule 8).
- 83.09 Narrow channels (Rule 9).
- 83.10 Traffic separation schemes (Rule 10).

Conduct of Vessels in Sight of One Another

- 83.11 Application (Rule 11).
- 83.12 Sailing vessels (Rule 12).
- 83.13 Overtaking (Rule 13).
- 83.14 Head-on situation (Rule 14).
- 83.15 Crossing situation (Rule 15).
- 83.16 Action by give-way vessel (Rule 16).
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- 83.32 Definitions (Rule 32).
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Subpart E-Exemptions

83.38 Exemptions (Rule 38).

Authority: Sec. 303, Pub. L. 108-293, 118 Stat. 1028 (33 U.S.C. 2001); Department of Homeland Security Delegation No. 0170.1.

Subpart A-General

§ 83.01 Application (Rule 1).

- (a) These Rules apply to all vessels upon the inland waters of the United States, and to vessels of the United States on the Canadian waters of the Great Lakes to the extent that there is no conflict with Canadian law. The regulations in this subchapter have preemptive effect over State or local regulation within the same field.
- (b)(i) These Rules constitute special rules made by an appropriate authority within the meaning of Rule 1(b) of the International Regulations for Preventing Collisions at Sea, 1972, including annexes currently in force for the United States ("International Regulations").

- (ii) All vessels complying with the construction and equipment requirements of the International Regulations are considered to be in compliance with these Rules.
- (c) Nothing in these Rules shall interfere with the operation of any special rules made by the Secretary of the Navy with respect to additional station or signal lights and shapes or whistle signals for ships of war and vessels proceeding under convoy, or by the Secretary with respect to additional station or signal lights and shapes for fishing vessels engaged in fishing as a fleet. These additional station or signal lights and shapes or whistle signals shall, so far as possible, be such that they cannot be mistaken for any light, shape, or signal authorized elsewhere under these Rules. Notice of such special rules shall be published in the Federal Register and, after the effective date specified in such notice, they shall have effect as if they were a part of these Rules.
- (d) Traffic separation schemes may be established for the purpose of these Rules. Vessel traffic service regulations may be in effect in certain areas.
- (e) Whenever the Secretary determines that a vessel or class of vessels of special construction or purpose cannot comply fully with the provisions of any of these Rules with respect to the number, position, range, or arc of

visibility of lights or shapes, as well as to the disposition and characteristics of sound-signaling appliances, the vessel shall comply with such other provisions in regard to the number, position, range, or arc of visibility of lights or shapes, as well as to the disposition and characteristics of sound-signaling appliances, as the Secretary shall have determined to be the closest possible compliance with these Rules. The Secretary may issue a certificate of alternative compliance for a vessel or class of vessels specifying the closest possible compliance with these Rules. The Secretary of the Navy shall make these determinations and issue certificates of alternative compliance for vessels of the Navy.

- (f) The Secretary may accept a certificate of alternative compliance issued by a contracting party to the International Regulations if it determines that the alternative compliance standards of the contracting party are substantially the same as those of the United States.
- (g) The operator of each self-propelled vessel 12 meters or more in length shall carry on board and maintain for ready reference a copy of these Rules.

§ 83.02 Responsibility (Rule 2).

(a) Nothing in these Rules shall exonerate any vessel,

or the owner, master, or crew thereof, from the consequences of any neglect to comply with these Rules or of the neglect of any precaution which may be required by the ordinary practice of seamen, or by the special circumstances of the case.

(b) In construing and complying with these Rules due regard shall be had to all dangers of navigation and collision and to any special circumstances, including the limitations of the vessels involved, which may make a departure from these Rules necessary to avoid immediate danger.

§ 83.03 General definitions (Rule 3).

For the purpose of these Rules and this chapter, except where the context otherwise requires:

- (a) The word <u>vessel</u> includes every description of water craft, including nondisplacement craft, WIG craft and seaplanes, used or capable of being used as a means of transportation on water;
- (b) The term <u>power-driven vessel</u> means any vessel propelled by machinery;
- (c) The term <u>sailing vessel</u> means any vessel under sail provided that propelling machinery, if fitted, is not being used;

- (d) The term <u>vessel engaged in fishing</u> means any vessel fishing with nets, lines, trawls, or other fishing apparatus which restricts maneuverability, but does not include a vessel fishing with trolling lines or other fishing apparatus which do not restrict maneuverability;
- (e) The word <u>seaplane</u> includes any aircraft designed to maneuver on the water;
- (f) The term <u>vessel not under command</u> means a vessel which, through some exceptional circumstance, is unable to maneuver as required by these Rules and is therefore unable to keep out of the way of another vessel;
- maneuver means a vessel which, from the nature of her work, is restricted in her ability to maneuver as required by these Rules and is therefore unable to keep out of the way of another vessel; vessels restricted in their ability to maneuver include, but are not limited to:
- (i) A vessel engaged in laying, servicing, or picking up a navigation mark, submarine cable, or pipeline;
- (ii) A vessel engaged in dredging, surveying, or underwater operations;
- (iii) A vessel engaged in replenishment or transferring persons, provisions, or cargo while underway;
 - (iv) A vessel engaged in the launching or recovery of

aircraft;

- (v) A vessel engaged in mine clearance operations; and
- (vi) A vessel engaged in a towing operation such as severely restricts the towing vessel and her tow in their ability to deviate from their course.
 - (h) [Reserved]
- (i) The word <u>underway</u> means that a vessel is not at anchor, or made fast to the shore, or aground;
- (j) The words <u>length</u> and <u>breadth</u> of a vessel mean her length overall and greatest breadth;
- (k) Vessels shall be deemed to be in sight of one another only when one can be observed visually from the other;
- (1) The term <u>restricted visibility</u> means any condition in which visibility is restricted by fog, mist, falling snow, heavy rainstorms, sandstorms, or any other similar causes;
- (m) The term <u>Wing-In-Ground (WIG) craft</u> means a multimodal craft which, in its main operational mode, flies in close proximity to the surface by utilizing surface-effect action;
- (n) <u>Western Rivers</u> means the Mississippi River, its tributaries, South Pass, and Southwest Pass, to the navigational demarcation lines dividing the high seas from

harbors, rivers, and other inland waters of the United

States, and the Port Allen-Morgan City Alternate Route, and
that part of the Atchafalaya River above its junction with
the Port Allen-Morgan City Alternate Route including the
Old River and the Red River;

- (o) Great Lakes means the Great Lakes and their connecting and tributary waters including the Calumet River as far as the Thomas J. O'Brien Lock and Controlling Works (between mile 326 and 327), the Chicago River as far as the east side of the Ashland Avenue Bridge (between mile 321 and 322), and the Saint Lawrence River as far east as the lower exit of Saint Lambert Lock;
- (p) <u>Secretary</u> means the Secretary of the Department in which the Coast Guard is operating;
- (q) Inland Waters means the navigable waters of the United States shoreward of the navigational demarcation lines dividing the high seas from harbors, rivers, and other inland waters of the United States and the waters of the Great Lakes on the United States side of the International Boundary;
- (r) <u>Inland Rules</u> or <u>Rules</u> mean the Inland Navigational Rules and the annexes thereto, which govern the conduct of vessels and specify the lights, shapes, and sound signals that apply on inland waters; and

(s) <u>International Regulations</u> means the International Regulations for Preventing Collisions at Sea, 1972, including annexes currently in force for the United States.

Subpart B-Steering and Sailing Rules

Conduct of Vessels in Any Condition of Visibility

§ 83.04 Application (Rule 4).

Rules in this subpart apply in any condition of visibility.

§ 83.05 Look-out (Rule 5).

Every vessel shall at all times maintain a proper look-out by sight and hearing as well as by all available means appropriate in the prevailing circumstances and conditions so as to make a full appraisal of the situation and of the risk of collision.

§ 83.06 Safe speed (Rule 6).

Every vessel shall at all times proceed at a safe speed so that she can take proper and effective action to avoid collision and be stopped within a distance appropriate to the prevailing circumstances and conditions. In determining a safe speed the following factors shall be among those taken into account:

- (a) By all vessels:
- (i) The state of visibility;
- (ii) The traffic density including concentration of fishing vessels or any other vessels;
- (iii) The maneuverability of the vessel with special reference to stopping distance and turning ability in the prevailing conditions;
- (iv) At night, the presence of background light such
 as from shores lights or from back scatter of her own
 lights;
- (v) The state of wind, sea, and current, and the proximity of navigational hazards; and
- (vi) The draft in relation to the available depth of water.
 - (b) Additionally, by vessels with operational radar:
- (i) The characteristics, efficiency and limitations of the radar equipment;
- (ii) Any constraints imposed by the radar range scale in use:
- (iii) The effect on radar detection of the sea state,
 weather, and other sources of interference;
- (iv) The possibility that small vessels, ice and other floating objects may not be detected by radar at an adequate range;

- (v) The number, location, and movement of vessels detected by radar; and
- (vi) The more exact assessment of the visibility that may be possible when radar is used to determine the range of vessels or other objects in the vicinity.

§ 83.07 Risk of collision (Rule 7).

- (a) Every vessel shall use all available means appropriate to the prevailing circumstances and conditions to determine if risk of collision exists. If there is any doubt such risk shall be deemed to exist.
- (b) Proper use shall be made of radar and other electronic equipment if fitted and operational, including long-range scanning to obtain early warning of risk of collision and radar plotting or equivalent systematic observation of detected objects.
- (c) Assumptions shall not be made on the basis of scanty information, especially scanty radar information.
- (d) In determining if risk of collision exists the following considerations shall be among those taken into account:
- (i) Such risk shall be deemed to exist if the compass bearing of an approaching vessel does not appreciably change; and

(ii) Such risk may sometimes exist even when an appreciable bearing change is evident, particularly when approaching a very large vessel or a tow or when approaching a vessel at close range.

§ 83.08 Action to avoid collision (Rule 8).

- (a) Any action taken to avoid collision shall be taken in accordance with the Rules of this Part and shall, if the circumstances of the case admit, be positive, made in ample time and with due regard to the observance of good seamanship.
- (b) Any alteration of course and/or speed to avoid collision shall, if the circumstances of the case admit, be large enough to be readily apparent to another vessel observing visually or by radar; a succession of small alterations of course and/or speed should be avoided.
- (c) If there is sufficient sea room, alteration of course alone may be the most effective action to avoid a close-quarters situation provided that it is made in good time, is substantial and does not result in another close-quarters situation.
- (d) Action taken to avoid collision with another vessel shall be such as to result in passing at a safe distance. The effectiveness of the action shall be

carefully checked until the other vessel is finally past and clear.

- (e) If necessary to avoid collision or allow more time to assess the situation, a vessel shall slacken her speed or take all way off by stopping or reversing her means of propulsion.
- (f)(i) A vessel which, by any of these Rules, is required not to impede the passage or safe passage of another vessel shall, when required by the circumstances of the case, take early action to allow sufficient sea room for the safe passage of the other vessel.
- (ii) A vessel required not to impede the passage or safe passage of another vessel is not relieved of this obligation if approaching the other vessel so as to involve risk of collision and shall, when taking action, have full regard to the action which may be required by the Rules of this part.
- (iii) A vessel the passage of which is not to be impeded remains fully obliged to comply with the Rules of this part when the two vessels are approaching one another so as to involve risk of collision.

§ 83.09 Narrow channels (Rule 9).

(a)(i) A vessel proceeding along the course of a

narrow channel or fairway shall keep as near to the outer limit of the channel or fairway which lies on her starboard side as is safe and practicable.

- (ii) Notwithstanding paragraph (a) (i) of this Rule 9 and Rule 14(a) (33 CFR 83.14(a)), a power-driven vessel operating in narrow channels or fairways on the Great Lakes, Western Rivers, or waters specified by the Secretary, and proceeding downbound with a following current shall have the right-of-way over an upbound vessel, shall propose the manner and place of passage, and shall initiate the maneuvering signals prescribed by Rule 34(a)(i) (33 CFR 83.34(a)(i)), as appropriate. The vessel proceeding upbound against the current shall hold as necessary to permit safe passing.
- (b) A vessel of less than 20 meters in length or a sailing vessel shall not impede the passage of a vessel that can safely navigate only within a narrow channel or fairway.
- (c) A vessel engaged in fishing shall not impede the passage of any other vessel navigating within a narrow channel or fairway.
- (d) A vessel shall not cross a narrow channel or fairway if such crossing impedes the passage of a vessel which can safely navigate only within that channel or

fairway. The latter vessel shall use the danger signal prescribed in Rule 34(d) (33 CFR 83.34(d)) if in doubt as to the intention of the crossing vessel.

- (e)(i) In a narrow channel or fairway when overtaking, the power-driven vessel intending to overtake another power-driven vessel shall indicate her intention by sounding the appropriate signal prescribed in Rule 34(c) (33 CFR 83.34(c) and take steps to permit safe passing. The power-driven vessel being overtaken, if in agreement, shall sound the same signal and may, if specifically agreed to, take steps to permit safe passing. If in doubt she shall sound the danger signal prescribed in Rule 34(d) (33 CFR 83.34(d)).
- (ii) This Rule does not relieve the overtaking vessel of her obligation under Rule 13 (33 CFR 83.13).
- (f) A vessel nearing a bend or an area of a narrow channel or fairway where other vessels may be obscured by an intervening obstruction shall navigate with particular alertness and caution and shall sound the appropriate signal prescribed in Rule 34(e) (33 CFR 83.34(e)).
- (g) Any vessel shall, if the circumstances of the case admit, avoid anchoring in a narrow channel.

§ 83.10 Traffic separation schemes (Rule 10).

- (a) This Rule 10 applies to traffic separation schemes and does not relieve any vessel of her obligation under any other Rule in this part.
 - (b) A vessel using a traffic separation scheme shall:
- (i) Proceed in the appropriate traffic lane in the general direction of traffic flow for that lane;
- (ii) So far as practicable keep clear of a traffic separation line or separation zone;
- (iii) Normally join or leave a traffic lane at the termination of the lane, but when joining or leaving from either side shall do so at as small an angle to the general direction of traffic flow as practicable.
- (c) A vessel shall, so far as practicable, avoid crossing traffic lanes but if obliged to do so shall cross on a heading as nearly as practicable at right angles to the general direction of traffic flow.
- (d)(i) A vessel shall not use an inshore traffic zone when she can safely use the appropriate traffic lane within the adjacent traffic separation scheme. However, vessels of less than twenty meters in length, sailing vessels, and vessels engaged in fishing may use the inshore traffic zone.
- (ii) Notwithstanding paragraph (d)(i) of this Rule 10, a vessel may use an inshore traffic zone when en route to

or from a port, offshore installation or structure, pilot station, or any other place situated within the inshore traffic zone, or to avoid immediate danger.

- (e) A vessel other than a crossing vessel or a vessel joining or leaving a lane shall not normally enter a separation zone or cross a separation line except:
- (i) In cases of emergency to avoid immediate danger; or
 - (ii) To engage in fishing within a separation zone.
- (f) A vessel navigating in areas near the terminations of traffic separation schemes shall do so with particular caution.
- (g) A vessel shall so far as practicable avoid anchoring in a traffic separation scheme or in areas near its terminations.
- (h) A vessel not using a traffic separation scheme shall avoid it by as wide a margin as is practicable.
- (i) A vessel engaged in fishing shall not impede the passage of any vessel following a traffic lane.
- (j) A vessel of less than 20 meters in length or a sailing vessel shall not impede the safe passage of a power-driven vessel following a traffic lane.
- (k) A vessel restricted in her ability to maneuver when engaged in an operation for the maintenance of safety

of navigation in a traffic separation scheme is exempted from complying with this Rule to the extent necessary to carry out the operation.

(1) A vessel restricted in her ability to maneuver when engaged in an operation for the laying, servicing, or picking up of a submarine cable, within a traffic separation scheme, is exempted from complying with this Rule to the extent necessary to carry out the operation.

Conduct of Vessels in Sight of One Another § 83.11 Application (Rule 11).

Rules in this subpart apply to vessels in sight of one another.

§ 83.12 Sailing vessels (Rule 12).

- (a) When two sailing vessels are approaching one another, so as to involve risk of collision, one of them shall keep out of the way of the other as follows:
- (i) When each has the wind on a different side, the vessel which has the wind on the port side shall keep out of the way of the other;
- (ii) When both have the wind on the same side, the vessel which is to windward shall keep out of the way of the vessel which is to leeward; and

- (iii) If a vessel with the wind on the port side sees a vessel to windward and cannot determine with certainty whether the other vessel has the wind on the port or on the starboard side, she shall keep out of the way of the other.
- (b) For the purpose of this Rule the windward side shall be deemed to be the side opposite to that on which the mainsail is carried or, in the case of a square-rigged vessel, the side opposite to that on which the largest fore-and-aft sail is carried.

§ 83.13 Overtaking (Rule 13).

- (a) Notwithstanding anything contained in Rules 4 through 18 (33 CFR 83.04 through 83.18)), any vessel overtaking any other shall keep out of the way of the vessel being overtaken.
- (b) A vessel shall be deemed to be overtaking when coming up with another vessel from a direction more than 22.5 degrees abaft her beam; that is, in such a position with reference to the vessel she is overtaking, that at night she would be able to see only the sternlight of that vessel but neither of her sidelights.
- (c) When a vessel is in any doubt as to whether she is overtaking another, she shall assume that this is the case and act accordingly.

(d) Any subsequent alteration of the bearing between the two vessels shall not make the overtaking vessel a crossing vessel within the meaning of these Rules or relieve her of the duty of keeping clear of the overtaken vessel until she is finally past and clear.

§ 83.14 Head-on situation (Rule 14).

- (a) Unless otherwise agreed, when two power-driven vessels are meeting on reciprocal or nearly reciprocal courses so as to involve risk of collision each shall alter her course to starboard so that each shall pass on the port side of the other.
- (b) Such a situation shall be deemed to exist when a vessel sees the other ahead or nearly ahead and by night she could see the masthead lights of the other in a line or nearly in a line or both sidelights and by day she observes the corresponding aspect of the other vessel.
- (c) When a vessel is in any doubt as to whether such a situation exists she shall assume that it does exist and act accordingly.
- (d) Notwithstanding paragraph (a) of this Rule 14, a power-driven vessel operating on the Great Lakes, Western Rivers, or waters specified by the Secretary, and proceeding downbound with a following current shall have

the right-of-way over an upbound vessel, shall propose the manner of passage, and shall initiate the maneuvering signals prescribed by Rule 34(a)(i) (33 CFR 83.34(a)(i)), as appropriate.

§ 83.15 Crossing situation (Rule 15).

- (a) When two power-driven vessels are crossing so as to involve risk of collision, the vessel which has the other on her starboard side shall keep out of the way and shall, if the circumstances of the case admit, avoid crossing ahead of the other vessel.
- (b) Notwithstanding paragraph (a) of this Rule 15, on the Great Lakes, Western Rivers, or water specified by the Secretary, a power-driven vessel crossing a river shall keep out of the way of a power-driven vessel ascending or descending the river.

§ 83.16 Action by give-way vessel (Rule 16).

Every vessel which is directed to keep out of the way of another vessel shall, so far as possible, take early and substantial action to keep well clear.

§ 83.17 Action by stand-on vessel (Rule 17).

(a)(i) Where one of two vessels is to keep out of the

way, the other shall keep her course and speed.

- (ii) The latter vessel may, however, take action to avoid collision by her maneuver alone, as soon as it becomes apparent to her that the vessel required to keep out of the way is not taking appropriate action in compliance with these Rules.
- (b) When, from any cause, the vessel required to keep her course and speed finds herself so close that collision cannot be avoided by the action of the give-way vessel alone, she shall take such action as will best aid to avoid collision.
- (c) A power-driven vessel which takes action in a crossing situation in accordance with paragraph (a)(ii) of this Rule 17, to avoid collision with another power-driven vessel shall, if the circumstances of the case admit, not alter course to port for a vessel on her own port side.
- (d) This Rule does not relieve the give-way vessel of her obligation to keep out of the way.

§ 83.18 Responsibilities between vessels (Rule 18).

Except where Rules 9, 10, and 13 (33 CFR 83.09, 83.10, and 83.13)) otherwise require:

(a) A power-driven vessel underway shall keep out of the way of:

- (i) A vessel not under command;
- (ii) A vessel restricted in her ability to maneuver;
- (iii) A vessel engaged in fishing; and(iv) a sailing vessel.
- (b) A sailing vessel underway shall keep out of the way of:
 - (i) A vessel not under command;
- (ii) A vessel restricted in her ability to maneuver;
 - (iii) A vessel engaged in fishing.
- (c) A vessel engaged in fishing when underway shall, so far as possible, keep out of the way of:
 - (i) A vessel not under command; and
 - (ii) A vessel restricted in her ability to maneuver.
 - (d) [Reserved].
- (e) A seaplane on the water shall, in general, keep well clear of all vessels and avoid impeding their navigation. In circumstances, however, where risk of collision exists, she shall comply with the Rules of this Part.
- (f)(i) A WIG craft shall when taking off, landing and in flight near the surface, keep well clear of all other vessels and avoid impeding their navigation;
 - (ii) A WIG craft operating on the water surface shall

comply with the Rules of this Part as a power-driven vessel.

Conduct of Vessels in Restricted Visibility § 83.19 Conduct of vessels in restricted visibility (Rule 19).

- (a) This Rule applies to vessels not in sight of one another when navigating in or near an area of restricted visibility.
- (b) Every vessel shall proceed at a safe speed adapted to the prevailing circumstances and conditions of restricted visibility. A power-driven vessel shall have her engines ready for immediate maneuver.
- (c) Every vessel shall have due regard to the prevailing circumstances and conditions of restricted visibility when complying with Rules 4 through 10 (33 CFR 83.04 through 83.10)).
- (d) A vessel which detects by radar alone the presence of another vessel shall determine if a close-quarters situation is developing or risk of collision exists. If so, she shall take avoiding action in ample time, provided that when such action consists of an alteration of course, so far as possible the following shall be avoided:
 - (i) An alteration of course to port for a vessel

forward of the beam, other than for a vessel being overtaken: and

- (ii) An alteration of course toward a vessel abeam or abaft the beam.
- (e) Except where it has been determined that a risk of collision does not exist, every vessel which hears apparently forward of her beam the fog signal of another vessel, or which cannot avoid a close-quarters situation with another vessel forward of her beam, shall reduce her speed to the minimum at which she can be kept on course. She shall if necessary take all her way off and, in any event, navigate with extreme caution until danger of collision is over.

Subpart C-Lights and Shapes

§ 83.20 Application (Rule 20).

- (a) Rules in this part shall be complied with in all weathers.
- (b) The Rules concerning lights shall be complied with from sunset to sunrise, and during such times no other lights shall be exhibited, except such lights as cannot be mistaken for the lights specified in these Rules or do not impair their visibility or distinctive character, or interfere with the keeping of a proper look-out.

- (c) The lights prescribed by these Rules shall, if carried, also be exhibited from sunrise to sunset in restricted visibility and may be exhibited in all other circumstances when it is deemed necessary.
- (d) The Rules concerning shapes shall be complied with by day.
- (e) The lights and shapes specified in these Rules shall comply with the provisions of Annex I of these Rules (33 CFR part 84).
- (f) A vessel's navigation lights and shapes may be lowered if necessary to pass under a bridge.

§ 83.21 Definitions (Rule 21).

- (a) Masthead light means a white light placed over the fore and aft centerline of the vessel showing an unbroken light over an arc of the horizon of 225 degrees and so fixed as to show the light from right ahead to 22.5 degrees abaft the beam on either side of the vessel, except that on a vessel of less than 12 meters in length the masthead light shall be placed as nearly as practicable to the fore and aft centerline of the vessel.
- (b) <u>Sidelights</u> mean a green light on the starboard side and a red light on the port side each showing an unbroken light over an arc of the horizon of 112.5 degrees

and so fixed as to show the light from right ahead to 22.5 degrees abaft the beam on its respective side. On a vessel of less than 20 meters in length the side lights may be combined in one lantern carried on the fore and aft centerline of the vessel, except that on a vessel of less than 12 meters in length the sidelights when combined in one lantern shall be placed as nearly as practicable to the fore and aft centerline of the vessel.

- (c) <u>Sternlight</u> means a white light placed as nearly as practicable at the stern showing an unbroken light over an arc of the horizon of 135 degrees and so fixed as to show the light 67.5 degrees from right aft on each side of the vessel.
- (d) Towing light means a yellow light having the same characteristics as the "sternlight" defined in paragraph(c) of this Rule.
- (e) All-round light means a light showing an unbroken light over an arc of the horizon of 360 degrees.
- (f) <u>Flashing light</u> means a light flashing at regular intervals at a frequency of 120 flashes or more per minute.
- (g) Special flashing light means a yellow light flashing at regular intervals at a frequency of 50 to 70 flashes per minute, placed as far forward and as nearly as practicable on the fore and aft centerline of the tow and

showing an unbroken light over an arc of the horizon of not less than 180 degrees nor more than 225 degrees and so fixed as to show the light from right ahead to abeam and no more than 22.5 degrees abaft the beam on either side of the vessel.

§ 83.22 Visibility of lights (Rule 22).

The lights prescribed in these Rules shall have an intensity as specified in Annex I to these Rules (33 CFR 84), so as to be visible at the following minimum ranges:

- (a) In a vessel of 50 meters or more in length:
- -A masthead light, 6 miles;
- -A sidelight, 3 miles;
- -A sternlight, 3 miles;
- -A towing light, 3 miles;
- -A white, red, green or yellow all-round light, 3 miles; and
 - -A special flashing light, 2 miles.
- (b) In a vessel of 12 meters or more in length but less than 50 meters in length:
- -A masthead light, 5 miles; except that where the length of the vessel is less than 20 meters, 3 miles;
 - -A sidelight, 2 miles;
 - -A sternlight, 2 miles;

- -A towing light, 2 miles;
- -A white, red, green or yellow all-round light, 2 miles; and
 - -A special flashing light, 2 miles.
 - (c) In a vessel of less than 12 meters in length:
 - -A masthead light, 2 miles;
 - -A sidelight, 1 mile;
 - -A sternlight, 2 miles;
 - -A towing light, 2 miles;
- -A white, red, green or yellow all-round light, 2 miles; and
 - -A special flashing light, 2 miles.
- (d) In an inconspicuous, partly submerged vessel or objects being towed:
 - -A white all-round light, 3 miles.

§ 83.23 Power-driven vessels underway (Rule 23).

- (a) A power-driven vessel underway shall exhibit:
- (i) A masthead light forward;
- (ii) A second masthead light abaft of and higher than the forward one; except that a vessel of less than 50 meters in length shall not be obliged to exhibit such light but may do so;
 - (iii) Sidelights; and

- (iv) A sternlight.
- (b) An air-cushion vessel when operating in the non-displacement mode shall, in addition to the lights prescribed in paragraph (a) of this Rule 23, exhibit an all-round flashing yellow light where it can best be seen.
- (c) A WIG craft only when taking off, landing and in flight near the surface shall, in addition to the lights prescribed in paragraph (a) of this Rule 23, exhibit a high intensity all-round flashing red light.
- (d) A power-driven vessel of less than 12 meters in length may, in lieu of the lights prescribed in paragraph(a) of this Rule 23, exhibit an all-round white light and sidelights.
- (e) A power-driven vessel when operating on the Great Lakes may carry an all-round white light in lieu of the second masthead light and sternlight prescribed in paragraph (a) of this Rule 23. The light shall be carried in the position of the second masthead light and be visible at the same minimum range.

§ 83.24 Towing and pushing (Rule 24).

- (a) A power-driven vessel when towing astern shall exhibit:
 - (i) Instead of the light prescribed either in Rule

- 23(a)(i) or 23(a)(ii), two masthead lights in a vertical line. When the length of the tow, measuring from the stern of the towing vessel to the after end of the tow exceeds 200 meters, three such lights in a vertical line;
 - (ii) Sidelights;
 - (iii) A sternlight;
- (iv) A towing light in a vertical line above the sternlight; and
- (v) When the length of the tow exceeds 200 meters, a diamond shape where it can best be seen.
- (b) When a pushing vessel and a vessel being pushed ahead are rigidly connected in a composite unit they shall be regarded as a power-driven vessel and exhibit the lights prescribed in Rule 23 (33 CFR 83.23).
- (c) A power-driven vessel when pushing ahead or towing alongside, except as required by paragraphs (b) and (i) of this Rule 24, shall exhibit:
- (i) Instead of the light prescribed either in Rule23(a)(i) or 23(a)(ii), two masthead lights in a verticalline;
 - (ii) Sidelights;
 - (iii) Two towing lights in a vertical line.
- (d) A power-driven vessel to which paragraphs (a) or(c) of this Rule 24 apply shall also comply with Rule

- 23(a)(i) and 23(a)(ii).
- (e) A vessel or object other than those referred to in paragraph (g) of this Rule 24 being towed shall exhibit:
 - (i) Sidelights;
 - (ii) A sternlight; and
- (iii) When the length of the tow exceeds 200 meters, a diamond shape where it can best be seen.
- (f) Provided that any number of vessels being towed alongside or pushed in a group shall be lighted as one vessel, except as provided in paragraph (f)(iii) of this Rule 24—
- (i) A vessel being pushed ahead, not being part of a composite unit, shall exhibit at the forward end, sidelights and a special flashing light;
- (ii) A vessel being towed alongside shall exhibit a sternlight and at the forward end, sidelights and a special flashing light; and
- (iii) When vessels are towed alongside on both sides of the towing vessels a sternlight shall be exhibited on the stern of the outboard vessel on each side of the towing vessel, and a single set of sidelights as far forward and as far outboard as is practicable, and a single special flashing light.
 - (q) An inconspicuous, partly submerged vessel or

object, or combination of such vessels or objects being towed, shall exhibit:

- (i) If it is less than 25 meters in breadth, one allround white light at or near each end;
- (ii) If it is 25 meters or more in breadth, four allround white lights to mark its length and breadth;
- (iii) If it exceeds 100 meters in length, additional all-round white lights between the lights prescribed in paragraphs (g)(i) and (ii) of this Rule 24 so that the distance between the lights shall not exceed 100 meters:

 Provided, that any vessels or objects being towed alongside each other shall be lighted as one vessel or object;
- (iv) A diamond shape at or near the aftermost extremity of the last vessel or object being towed;
- (v) The towing vessel may direct a searchlight in the direction of the tow to indicate its presence to an approaching vessel.
- (h) Where from any sufficient cause it is impracticable for a vessel or object being towed to exhibit the lights prescribed in paragraph (e) or (g) of this Rule 24, all possible measures shall be taken to light the vessel or object towed or at least to indicate the presence of the unlighted vessel or object.
 - (i) Notwithstanding paragraph (c) of this Rule 24, on

the Western Rivers (except below the Huey P. Long Bridge on the Mississippi River) and on waters specified by the Secretary, a power-driven vessel when pushing ahead or towing alongside, except as paragraph (b) of this Rule 24 applies, shall exhibit:

- (i) Sidelights; and
- (ii) Two towing lights in a vertical line.
- (j) Where from any sufficient cause it is impracticable for a vessel not normally engaged in towing operations to display the lights prescribed by paragraph (a), (c) or (i) of this Rule 24, such vessel shall not be required to exhibit those lights when engaged in towing another vessel in distress or otherwise in need of assistance. All possible measures shall be taken to indicate the nature of the relationship between the towing vessel and the vessel being assisted. The searchlight authorized by Rule 36 (33 CFR 83.36) may be used to illuminate the tow.
- (k) The following barges shall display at night and if practicable in periods of restricted visibility the lights described in paragraph (m) of this Rule 24:
- (i) Every barge projecting into a buoyed or restricted channel.
 - (ii) Every barge so moored that it reduces the

available navigable width of any channel to less than 80 meters.

- (iii) Barges moored in groups more than two barges wide or to a maximum width of over 25 meters.
- (iv) Every barge not moored parallel to the bank or dock.
- (1) Barges described in this Rule 24 paragraph (1) shall carry two unobstructed all-round white lights of an intensity to be visible for at least 1 nautical mile and meeting the technical requirements as prescribed in 33 CFR 84.15.
- (m) A barge or group of barges at anchor or made fast to one or more mooring buoys or other similar device, in lieu of the provisions of Inland Navigation Rule 30, may carry unobstructed all-round white lights of an intensity to be visible for at least 1 nautical mile that meet the requirements of 33 CFR 84.15 and shall be arranged as follows:
- (i) Any barge that projects from a group formation, shall be lighted on its outboard corners.
- (ii) On a single barge moored in water where other vessels normally navigate on both sides of the barge, lights shall be placed to mark the corner extremities of the barge.

- (iii) On barges moored in group formation, moored in water where other vessels normally navigate on both sides of the group, lights shall be placed to mark the corner extremities of the group.
- (n) The following are exempt from the requirements of this section:
- (i) A barge or group of barges moored in a slip or slough used primarily for mooring purposes.
- (ii) A barge or group of barges moored behind a pierhead.
- (iii) A barge less than 20 meters in length when
 moored in a special anchorage area designated in accordance
 with § 109.10 of this chapter.
- (o) Barges moored in well-illuminated areas are exempt from the lighting requirements of this section. These areas are as follows:

Chicago Sanitary Ship Canal

- (1) Mile 293.2 to 293.9
- (3) Mile 295.2 to 296.1
- (5) Mile 297.5 to 297.8
- (7) Mile 298 to 298.2
- (9) Mile 298.6 to 298.8
- (11) Mile 299.3 to 299.4
- (13) Mile 299.8 to 300.5

- (15) Mile 303 to 303.2
- (17) Mile 303.7 to 303.9
- (19) Mile 305.7 to 305.8
- (21) Mile 310.7 to 310.9
- (23) Mile 311 to 311.2
- (25) Mile 312.5 to 312.6
- (27) Mile 313.8 to 314.2
- (29) Mile 314.6
- (31) Mile 314.8 to 315.3
- (33) Mile 315.7 to 316
- (35) Mile 316.8
- (37) Mile 316.85 to 317.05
- (39) Mile 317.5
- (41) Mile 318.4 to 318.9
- (43) Mile 318.7 to 318.8
- (45) Mile 320 to 320.3
- (47) Mile 320.6
- (49) Mile 322.3 to 322.4
- (51) Mile 322.8
- (53) Mile 322.9 to 327.2

Calumet Sag Channel

(61) Mile 316.5

Little Calumet River

(71) Mile 321.2

(73) Mile 322.3

Calumet River

- (81) Mile 328.5 to 328.7
- (83) Mile 329.2 to 329.4
- (85) Mile 330 west bank to 330.2
- (87) Mile 331.4 to 331.6
- (89) Mile 332.2 to 332.4
- (91) Mile 332.6 to 332.8

Cumberland River

- (101) Mile 126.8
- (103) Mile 191
- (p) Dredge pipelines that are floating or supported on trestles shall display the following lights at night and in periods of restricted visibility.
 - (i) One row of yellow lights. The lights must be:
 - (1) Flashing 50 to 70 times per minute,
 - (2) Visible all around the horizon,
- (3) Visible for at least 2 miles on a clear dark night,
- (4) Not less than 1 and not more than 3.5 meters above the water,
 - (5) Approximately equally spaced, and
- (6) Not more than 10 meters apart where the pipeline crosses a navigable channel. Where the pipeline does not

cross a navigable channel the lights must be sufficient in number to clearly show the pipeline's length and course.

- (ii) Two red lights at each end of the pipeline, including the ends in a channel where the pipeline is separated to allow vessels to pass (whether open or closed). The lights must be:
 - (1) Visible all around the horizon, and
- (2) Visible for at least 2 miles on a clear dark night, and
- (3) One meter apart in a vertical line with the lower light at the same height above the water as the flashing yellow light.

§ 83.25 Sailing vessels underway and vessels under oars (Rule 25).

- (a) A sailing vessel underway shall exhibit:
- (i) Sidelights; and
- (ii) A sternlight.
- (b) In a sailing vessel of less than 20 meters in length the lights prescribed in paragraph (a) of this Rule 25 may be combined in one lantern carried at or near the top of the mast where it can best be seen.
- (c) A sailing vessel underway may, in addition to the lights prescribed in paragraph (a) of this Rule 25, exhibit

at or near the top of the mast, where they can best be seen, two all-round lights in a vertical line, the upper being red and the lower green, but these lights shall not be exhibited in conjunction with the combined lantern permitted by paragraph (b) of this Rule 25.

- (d)(i) A sailing vessel of less than 7 meters in length shall, if practicable, exhibit the lights prescribed in paragraph (a) or (b) of this Rule 25, but if she does not, she shall exhibit an all-round white light or have ready at hand an electric torch or lighted lantern showing a white light which shall be exhibited in sufficient time to prevent collision.
- (ii) A vessel under oars may exhibit the lights prescribed in this Rule for sailing vessels, but if she does not, she shall exhibit an all-round while light or have ready at hand an electric torch or lighted lantern showing a white light which shall be exhibited in sufficient time to prevent collision.
- (e) A vessel proceeding under sail when also being propelled by machinery shall exhibit forward where it can best be seen a conical shape, apex downward. A vessel of less than 12 meters in length is not required to exhibit this shape, but may do so.

§ 83.26 Fishing vessels (Rule 26).

- (a) A vessel engaged in fishing, whether underway or at anchor, shall exhibit only the lights and shapes prescribed in this Rule.
- (b) A vessel when engaged in trawling, by which is meant the dragging through the water of a dredge net or other apparatus used as a fishing appliance, shall exhibit:
- (i) Two all-round lights in a vertical line, the upper being green and the lower white, or a shape consisting of two cones with their apexes together in a vertical line one above the other;
- (ii) A masthead light abaft of and higher than the all-round green light; a vessel of less than 50 meters in length shall not be obliged to exhibit such a light but may do so; and
- (iii) When making way through the water, in addition to the lights prescribed in this paragraph, sidelights and a sternlight.
- (c) A vessel engaged in fishing, other than trawling, shall exhibit:
- (i) Two all-round lights in a vertical line, the upper being red and the lower white, or a shape consisting of two cones with apexes together in a vertical line one above the other;

- (ii) When there is outlying gear extending more than 150 meters horizontally from the vessel, an all-round white light or a cone apex upward in the direction of the gear; and
- (iii) When making way through the water, in addition to the lights prescribed in this paragraph, sidelights and a sternlight.
 - (d) [Reserved].
- (e) A vessel when not engaged in fishing shall not exhibit the lights or shapes prescribed in this Rule 26, but only those prescribed for a vessel of her length.
- (f) Additional Signals for fishing vessels fishing in close proximity:
- (i) The lights mentioned herein shall be placed where they can best be seen. They shall be at least 0.9 meter apart but at a lower level than lights prescribed in this Rule. The lights shall be visible all around the horizon at a distance of at least 1 mile but at a lesser distance from the lights prescribed by this Rule 26 (a) through (c) for fishing vessels.
 - (ii) Signals for trawlers
- (1) Vessels when engaged in trawling, whether using demersal or pelagic gear, may exhibit:
 - (A) When shooting their nets: two white lights in a

vertical line;

- (B) When hauling their nets: one white light over one red light in a vertical line;
- (C) When a net has come fast upon an obstruction: two red lights in a vertical line.
 - (2) Each vessel engaged in pair trawling may exhibit:
- (A) By night, a searchlight directed forward and in the direction of the other vessel of the pair;
- (B) When shooting or hauling their nets or when their nets have come fast upon an obstruction, the lights prescribed in paragraph (a) of this Rule 26.
 - (iii) Signals for purse seiners.
- (1) Vessels engaged in fishing with purse seine gear may exhibit two yellow lights in a vertical line. These lights shall flash alternately every second and with equal light and occultation duration. These lights may be exhibited only when the vessel is hampered by its fishing gear.
 - (2) [Reserved].

§ 83.27 Vessels not under command or restricted in their ability to maneuver (Rule 27).

- (a) A vessel not under command shall exhibit:
- (i) Two all-round red lights in a vertical line where

they can best be seen;

- (ii) Two balls or similar shapes in a vertical line where they can best be seen; and
- (iii) When making way through the water, in addition to the lights prescribed in this paragraph, sidelights and a sternlight.
- (b) A vessel restricted in her ability to maneuver, except a vessel engaged in mine clearance operations, shall exhibit:
- (i) Three all-round lights in a vertical line where they can best be seen. The highest and lowest of these lights shall be red and the middle light shall be white;
- (ii) Three shapes in a vertical line where they can best be seen. The highest and lowest of these shapes shall be balls and the middle one a diamond;
- (iii) When making way through the water, masthead lights, sidelights and a sternlight, in addition to the lights prescribed in paragraph (b)(i) of this Rule 27; and
- (iv) When at anchor, in addition to the lights or shapes prescribed in paragraphs (b)(i) and (ii) of this Rule 27, the light, lights or shapes prescribed in Rule 30 (33 CFR 83.30).
- (c) A vessel engaged in a towing operation which severely restricts the towing vessel and her tow in their

ability to deviate from their course shall, in addition to the lights or shapes prescribed in paragraphs (b)(i) and (ii) of this Rule 27, exhibit the lights or shapes prescribed in Rule 24 (33 CFR 83.24).

- (d) A vessel engaged in dredging or underwater operations, when restricted in her ability to maneuver, shall exhibit the lights and shapes prescribed in paragraphs (b)(i), (ii), and (iii) of this Rule 27 and shall in addition, when an obstruction exists, exhibit:
- (i) Two all-round red lights or two balls in a vertical line to indicate the side on which the obstruction exists;
- (ii) Two all-round green lights or two diamonds in a vertical line to indicate the side on which another vessel may pass; and
- (iii) When at anchor, the lights or shapes prescribed by this paragraph, instead of the lights or shape prescribed in Rule 30 (33 CFR 83.30) for anchored vessels.
- (e) Whenever the size of a vessel engaged in diving operations makes it impracticable to exhibit all lights and shapes prescribed in paragraph (d) of this Rule 27, the following shall instead be exhibited:
- (i) Three all-round lights in a vertical line where they can best be seen. The highest and lowest of these

lights shall be red and the middle light shall be white;

- (ii) A rigid replica of the international Code flag
 "A" not less than 1 meter in height. Measures shall be
 taken to insure its all-round visibility.
- (f) A vessel engaged in mine clearance operations shall, in addition to the lights prescribed for a power-driven vessel in Rule 23 (33 CFR 83.23) or to the lights or shape prescribed for a vessel at anchor in Rule 30 (33 CFR 83.30), as appropriate, exhibit three all-round green lights or three balls. One of these lights or shapes shall be exhibited near the foremast head and one at each end of the fore yard. These lights or shapes indicate that it is dangerous for another vessel to approach within 1000 meters of the mine clearance vessel.
- (g) A vessel of less than 12 meters in length, except when engaged in diving operations, is not required to exhibit the lights or shapes prescribed in this Rule.
- (h) The signals prescribed in this Rule are not signals of vessels in distress and requiring assistance. Such signals are contained in Annex IV to these Rules (33 CFR part 88).
- (i)(i) Law enforcement vessels may display a flashing blue light when engaged in direct law enforcement or public safety activities. This light must be located so that it

does not interfere with the visibility of the vessel's navigation lights.

- (ii) The blue light described in this section may be displayed by law enforcement vessels of the United States and the States and their political subdivisions.
- (j)(i) Vessels engaged in government sanctioned public safety activities, and commercial vessels performing similar functions, may display an alternately flashing red and yellow light signal. This identification light signal must be located so that it does not interfere with the visibility of the vessel's navigation lights. The identification light signal may be used only as an identification signal and conveys no special privilege. Vessels using the identification light signal during public safety activities must abide by the Inland Navigation Rules, and must not presume that the light or the exigency gives them precedence or right of way.
- (ii) Public safety activities include but are not limited to patrolling marine parades, regattas, or special water celebrations; traffic control; salvage; firefighting; medical assistance; assisting disabled vessels; and search and rescue.

§ 83.28 (Rule 28) [Reserved].

§ 83.29 Pilot vessels (Rule 29).

- (a) A vessel engaged on pilotage duty shall exhibit:
- (i) At or near the masthead, two all-round lights in a vertical line, the upper being white and the lower red;
- (ii) When underway, in addition, sidelights and a sternlight; and
- (iii) When at anchor, in addition to the lights prescribed in paragraph (a)(i) of this Rule 29, the anchor light, lights, or shape prescribed in Rule 30 for anchored vessels.
- (b) A pilot vessel when not engaged on pilotage duty shall exhibit the lights or shapes prescribed for a vessel of her length.

§ 83.30 Anchored vessels and vessels aground (Rule 30).

- (a) A vessel at anchor shall exhibit where it can best be seen:
- (i) In the fore part, an all-round white light or one ball; and
- (ii) at or near the stern and at a lower level than the light prescribed in paragraph (a)(i) of this Rule 30, an all-round white light.
 - (b) A vessel of less than 50 meters in length may

exhibit an all-round white light where it can best be seen instead of the lights prescribed in paragraph (a) of this Rule 30.

- (c) A vessel at anchor may, and a vessel of 100 meters or more in length shall, also use the available working or equivalent lights to illuminate her decks.
- (d) A vessel aground shall exhibit the lights prescribed in paragraph (a) or (b) of this Rule 30 and in addition, if practicable, where they can best be seen:
 - (i) Two all-round red lights in a vertical line; and
 - (ii) Three balls in a vertical line.
- (e) A vessel of less than 7 meters in length, when at anchor, not in or near a narrow channel, fairway, anchorage, or where other vessels normally navigate, shall not be required to exhibit the lights or shape prescribed in paragraphs (a) and (b) of this Rule 30.
- (f) A vessel of less than 12 meters in length when aground shall not be required to exhibit the lights or shapes prescribed in paragraphs (d)(i) and (ii) of this Rule 30.
- (g) A vessel of less than 20 meters in length, when at anchor in a special anchorage area designated by the Coast Guard, shall not be required to exhibit the anchor lights and shapes required by this Rule 30.

§ 83.31 Seaplanes (Rule 31).

Where it is impracticable for a seaplane or a WIG craft to exhibit lights and shapes of the characteristics or in the positions prescribed in the Rules of this part she shall exhibit lights and shapes as closely similar in characteristics and position as is possible.

Subpart D-Sound and Light Signals

§ 83.32 Definitions (Rule 32).

- (a) The word whistle means any sound signaling appliance capable of producing the prescribed blasts and which complies with specifications in Annex III to these Rules (33 CFR part 86).
- (b) The term short blast means a blast of about 1 second's duration.
- (c) The term <u>prolonged blast</u> means a blast of from 4 to 6 seconds' duration.

§ 83.33 Equipment for sound signals (Rule 33).

(a) A vessel of 12 meters or more in length shall be provided with a whistle, a vessel of 20 meters or more in length shall be provided with a bell in addition to a whistle, and a vessel of 100 meters or more in length

shall, in addition, be provided with a gong, the tone and sound of which cannot be confused with that of the bell. The whistle, bell and gong shall comply with the specifications in Annex III to these Rules (33 CFR part 86). The bell or gong or both may be replaced by other equipment having the same respective sound characteristics, provided that manual sounding of the prescribed signals shall always be possible.

(b) A vessel of less than 12 meters in length shall not be obliged to carry the sound signaling appliances prescribed in paragraph (a) of this Rule 33 but if she does not, she shall be provided with some other means of making an efficient sound signal.

§ 83.34 Maneuvering and warning signals (Rule 34).

- (a) When power-driven vessels are in sight of one another and meeting or crossing at a distance within half a mile of each other, each vessel underway, when maneuvering as authorized or required by these Rules:
- (i) Shall indicate that maneuver by the following signals on her whistle:
- -One short blast to mean "I intend to leave you on my port side";
 - -Two short blasts to mean "I intend to leave you on my

starboard side"; and

-Three short blasts to mean "I am operating astern propulsion".

- (ii) Upon hearing the one or two blast signal of the other shall, if in agreement, sound the same whistle signal and take the steps necessary to effect a safe passing. If, however, from any cause, the vessel doubts the safety of the proposed maneuver, she shall sound the danger signal specified in paragraph (d) of this Rule 34 and each vessel shall take appropriate precautionary action until a safe passing agreement is made.
- (b) A vessel may supplement the whistle signals prescribed in paragraph (a) of this Rule 34 by light signals:
- (i) These signals shall have the following significance:
- -One flash to mean "I intend to leave you on my port side":
- -Two flashes to mean "I intend to leave you on my starboard side";
- -Three flashes to mean "I am operating astern propulsion";
- (ii) The duration of each flash shall be about 1 second; and

- (iii) The light used for this signal shall, if fitted, be one all-round white or yellow light, visible at a minimum range of 2 miles, synchronized with the whistle, and shall comply with the provisions of Annex I to these Rules (33 CFR part 84).
 - (c) When in sight of one another:
- (i) A power-driven vessel intending to overtake another power-driven vessel shall indicate her intention by the following signals on her whistle:
- -One short blast to mean "I intend to overtake you on your starboard side";
- -Two short blasts to mean "I intend to overtake you on your port side"; and
- (ii) The power-driven vessel about to be overtaken shall, if in agreement, sound a similar sound signal. If in doubt she shall sound the danger signal prescribed in paragraph (d) of this Rule 34.
- (d) When vessels in sight of one another are approaching each other and from any cause either vessel fails to understand the intentions or actions of the other, or is in doubt whether sufficient action is being taken by the other to avoid collision, the vessel in doubt shall immediately indicate such doubt by giving at least five short and rapid blasts on the whistle. This signal may be

supplemented by a light signal of at least five short and rapid flashes.

- (e) A vessel nearing a bend or an area of a channel or fairway where other vessels may be obscured by an intervening obstruction shall sound one prolonged blast.

 This signal shall be answered with a prolonged blast by any approaching vessel that may be within hearing around the bend or behind the intervening obstruction.
- (f) If whistles are fitted on a vessel at a distance apart of more than 100 meters, one whistle only shall be used for giving maneuvering and warning signals.
- (g) When a power-driven vessel is leaving a dock or berth, she shall sound one prolonged blast.
- (h) A vessel that reaches agreement with another vessel in a head-on, crossing, or overtaking situation, as for example, by using the radiotelephone as prescribed by the Vessel Bridge-to-Bridge Radiotelephone Act (85 Stat. 164; 33 U.S.C. 1201 et seq.), is not obliged to sound the whistle signals prescribed by this Rule, but may do so. If agreement is not reached, then whistle signals shall be exchanged in a timely manner and shall prevail.

§ 83.35 Sound signals in restricted visibility (Rule 35).

In or near an area of restricted visibility, whether

by day or night, the signals prescribed in this Rule 35 shall be used as follows:

- (a) A power-driven vessel making way through the water shall sound at intervals of not more than 2 minutes one prolonged blast.
- (b) A power-driven vessel underway but stopped and making no way through the water shall sound at intervals of not more than 2 minutes two prolonged blasts in succession with an interval of about 2 seconds between them.
- (c) A vessel not under command; a vessel restricted in her ability to maneuver, whether underway or at anchor; a sailing vessel; a vessel engaged in fishing, whether underway or at anchor; and a vessel engaged in towing or pushing another vessel shall, instead of the signals prescribed in paragraphs (a) or (b) of this Rule 35, sound at intervals of not more than 2 minutes, three blasts in succession; namely, one prolonged followed by two short blasts.
 - (d) [Reserved].
- (e) A vessel towed or if more than one vessel is towed the last vessel of the tow, if manned, shall at intervals of not more than 2 minutes sound four blasts in succession; namely, one prolonged followed by three short blasts. When practicable, this signal shall be made immediately after

the signal made by the towing vessel.

- (f) When a pushing vessel and a vessel being pushed ahead are rigidly connected in a composite unit they shall be regarded as a power-driven vessel and shall give the signals prescribed in paragraphs (a) or (b) of this Rule 35.
- (g) A vessel at anchor shall at intervals of not more than 1 minute ring the bell rapidly for about 5 seconds. In a vessel of 100 meters or more in length the bell shall be sounded in the forepart of the vessel and immediately after the ringing of the bell the gong shall be sounded rapidly for about 5 seconds in the after part of the vessel. A vessel at anchor may in addition sound three blasts in succession; namely, one short, one prolonged and one short blast, to give warning of her position and of the possibility of collision to an approaching vessel.
- (h) A vessel aground shall give the bell signal and if required the gong signal prescribed in paragraph (f) of this Rule 35 and shall, in addition, give three separate and distinct strokes on the bell immediately before and after the rapid ringing of the bell. A vessel aground may in addition sound an appropriate whistle signal.
- (i) A vessel of 12 meters or more but less than 20 meters in length shall not be obliged to give the bell

signals prescribed in paragraphs (g) and (h) of this Rule 35. However, if she does not, she shall make some other efficient sound signal at intervals of not more than 2 minutes.

- (j) A vessel of less than 12 meters in length shall not be obliged to give the above-mentioned signals but, if she does not, shall make some other efficient sound signal at intervals of not more than 2 minutes.
- (k) A pilot vessel when engaged on pilotage duty may in addition to the signals prescribed in paragraphs (a),(b), or (g) of this Rule 35 sound an identity signal consisting of four short blasts.
- (1) The following vessels shall not be required to sound signals as prescribed in paragraph (g) of this Rule 35 when anchored in a special anchorage area designated by the Coast Guard:
 - (i) A vessel of less than 20 meters in length; and
- (ii) A barge, canal boat, scow, or other nondescript craft.

§ 83.36 Signals to attract attention (Rule 36).

If necessary to attract the attention of another vessel, any vessel may make light or sound signals that cannot be mistaken for any signal authorized elsewhere in

these Rules, or may direct the beam of her searchlight in the direction of the danger, in such a way as not to embarrass any vessel.

§ 83.37 Distress signals (Rule 37).

When a vessel is in distress and requires assistance she shall use or exhibit the signals described in Annex IV to these Rules (33 CFR part 88).

Subpart E-Exemptions

§ 83.38 Exemptions (Rule 38).

Any vessel or class of vessels, the keel of which is laid or which is at a corresponding stage of construction before December 24, 1980, provided that she complies with the requirements of—

- (a) The Act of June 7, 1897 (30 Stat. 96), as amended (33 U.S.C. 154-232) for vessels navigating the waters subject to that statute;
- (b) Section 4233 of the Revised Statutes (33 U.S.C. 301-356) for vessels navigating the waters subject to that statute;
- (c) The Act of February 8, 1895 (28 Stat. 645), as amended (33 U.S.C. 241-295) for vessels navigating the waters subject to that statute; or

- (d) Sections 3, 4, and 5 of the Act of April 25, 1940 (54 Stat. 163), as amended (46 U.S.C. 526b, c, and d) for motorboats navigating the waters subject to that statute; shall be exempted from compliance with the technical Annexes to these Rules as follows:
- (i) The installation of lights with ranges prescribed in Rule 22, until 4 years after the effective date of the Inland Navigational Rules Act of 1980 (Pub. L. 96-591), except that vessels of less than 20 meters in length are permanently exempt;
- (ii) The installation of lights with color specifications as prescribed in Annex I to these Rules (33 CFR part 84), until 4 years after the effective date of the Inland Navigational Rules Act of 1980 (Pub. L. 96-591), except that vessels of less than 20 meters in length are permanently exempt;
- (iii) The repositioning of lights as a result of conversion to metric units and rounding off measurement figures, are permanently exempt; and
- (iv) The horizontal repositioning of masthead lights prescribed by Annex I to these Rules (33 CFR part 84):
- (1) On vessels of less than 150 meters in length, permanent exemption.
 - (2) On vessels of 150 meters or more in length, until

- 9 years after the effective date of the Inland Navigational Rules Act of 1980 (Pub. L. 96-591).
- (v) The restructuring or repositioning of all lights to meet the prescriptions of Annex I to these Rules (33 CFR part 86), until 9 years after the effective date of the Inland Navigational Rules Act of 1980 (Pub. L. 96-591);
- (vi) power-driven vessels of 12 meters or more but less than 20 meters in length are permanently exempt from the provisions of Rule 23(a)(i) and (iv) (33 CFR 83.23(a)(i) and (iv) provided that, in place of these lights, the vessel exhibits a white light aft visible all round the horizon; and
- (vii) the requirements for sound signal appliances prescribed in Annex III to these Rules (33 CFR part 86), until 9 years after the effective date of the Inland Navigational Rules Act of 1980 (Pub. L. 96-591).
 - 2. Revise part 84 to read as follows:

PART 84-ANNEX I: POSITIONING AND TECHNICAL DETAILS OF LIGHTS AND SHAPES

Section Contents

- § 84.01 Definitions.
- § 84.02 Vertical positioning and spacing of lights.
- § 84.03 Horizontal positioning and spacing of lights.
- § 84.04 Details of location of direction-indicating lights for fishing vessels, dredgers and vessels engaged in underwater operations.
- § 84.05 Screens.
- § 84.06 Shapes.

- § 84.07 Color specification of lights.
- § 84.08 Intensity of lights.
- § 84.09 Horizontal sectors.
- § 84.10 Vertical sectors.
- § 84.11 Intensity of non-electric lights.
- § 84.12 Maneuvering light.
- § 84.13 High-speed craft.
- § 84.14 Approval.

Authority: 33 U.S.C. 2071; Department of Homeland Security Delegation No. 0170.1.

§ 84.01 Definitions.

- (a) The term <u>height above the hull</u> means height above the uppermost continuous deck. This height shall be measured from the position vertically beneath the location of the light.
- (b) <u>High-speed craft</u> means a craft capable of maximum speed in meters per second (m/s) equal to or exceeding: $3.7\nabla0.1667$; where ∇ =displacement corresponding to the design waterline $(meters^3)$.

Note to paragraph (b): The same formula expressed in pounds and knots is maximum speed in knots (kts) equal to exceeding 1.98 (lbs) $3.7\nabla0.1667$; where ∇ =displacement corresponding to design waterline in pounds.

(c) The term <u>practical cut-off</u> means, for vessels 20 meters or more in length, 12.5 percent of the minimum luminous intensity (Table 84.15(b)) corresponding to the greatest range of visibility for which the requirements of Annex I are met.

(d) The term Rule or Rules means the Inland Navigation Rules contained in sec. 2 of the Inland Navigational Rules Act of 1980 (Pub. L. 96-591, 94 Stat. 3415, 33 U.S.C. 2001, December 24, 1980) as amended.

§ 84.02 Vertical positioning and spacing of lights.

- (a) On a power-driven vessel of 20 meters or more in length the masthead lights shall be placed as follows:
- (i) The forward masthead light, or if only one masthead light is carried, then that light, at a height above the hull of not less than 5 meters, and, if the breadth of the vessel exceeds 5 meters, then at a height above the hull not less than such breadth, so however that the light need not be placed at a greater height above the hull than 8 meters;
- (ii) When two masthead lights are carried the after one shall be at least 2 meters vertically higher than the forward one.
- (b) The vertical separation of the masthead lights of power-driven vessels shall be such that in all normal conditions of trim the after light will be seen over and separate from the forward light at a distance of 1000 meters from the stem when viewed from water level.
 - (c) The masthead light of a power-driven vessel of 12

meters but less than 20 meters in length shall be placed at a height above the gunwale of not less than 2.5 meters.

- (d) The masthead light, or the all-round light described in Rule 23(d) (33 CFR 83.23(d)), of a power-driven vessel of less than 12 meters in length shall be carried at least one meter higher than the sidelights.
- (e) One of the two or three masthead lights prescribed for a power-driven vessel when engaged in towing or pushing another vessel shall be placed in the same position as either the forward masthead light or the after masthead light, provided that the lowest after masthead light shall be at least 2 meters vertically higher than the highest forward masthead light.
- (f)(i) The masthead light or lights prescribed in Rule 23(a) shall be so placed as to be above and clear of all other lights and obstructions except as described in paragraph (f)(ii) of this section.
- (ii) When it is impracticable to carry the all-round lights prescribed in Rule 27(b)(i) (33 CFR 83.27(b)(i)) below the masthead lights, they may be carried above the after masthead light(s) or vertically in between the forward masthead light(s) and after masthead light(s), provided that in the latter case the requirement of § 84.03(d) shall be complied with.

- (g) The sidelights of a power-driven vessel shall be placed at least one meter lower than the forward masthead light. They shall not be so low as to be interfered with by deck lights.
 - (h) [Reserved].
- (i) When the Rules prescribe two or three lights to be carried in a vertical line, they shall be spaced as follows:
- (i) On a vessel of 20 meters in length or more such lights shall be spaced not less than 1 meter apart, and the lowest of these lights shall, except where a towing light is required, be placed at a height of not less than 4 meters above the hull;
- (ii) On a vessel of less than 20 meters in length such lights shall be spaced not less than 1 meter apart and the lowest of these lights shall, except where a towing light is required, be placed at a height of not less than 2 meters above the qunwale;
- (iii) When three lights are carried they shall be equally spaced.
- (j) The lower of the two all-round lights prescribed for a vessel when engaged in fishing shall be a height above the sidelights not less than twice the distance between the two vertical lights.

(k) The forward anchor light prescribed in Rule 30(a)(i) (33 CFR 83.30(a)(i)), when two are carried, shall not be less than 4.5 meters above the after one. On a vessel of 50 meters or more in length this forward anchor light shall be placed at a height or not less than 6 meters above the hull.

§ 84.03 Horizontal positioning and spacing of lights.

- (a) Except as specified in paragraph (e) of this section, when two masthead lights are prescribed for a power-driven vessel, the horizontal distance between them must not be less than one quarter of the length of the vessel but need not be more than 50 meters. The forward light must be placed not more than one half of the length of the vessel from the stem.
- (b) On a power-driven vessel of 20 meters or more in length the sidelights shall not be placed in front of the forward masthead lights. They shall be placed at or near the side of the vessel.
- (c) When the lights prescribed in Rule 27(b)(i) (33 CFR 83.27(b)(i)) are placed vertically between the forward masthead light(s) and the after masthead light(s) these all-round lights shall be placed at a horizontal distance of not less than 2 meters from the fore and aft centerline

of the vessel in the athwartship direction.

- (d) When only one masthead light is prescribed for a power-driven vessel, this light must be exhibited forward of amidships. For a vessel of less than 20 meters in length, the vessel shall exhibit one masthead light as far forward as is practicable.
- (e) On power-driven vessels 50 meters but less than 60 meters in length operated on the Western Rivers, and those waters specified in § 89.25 of this chapter, the horizontal distance between masthead lights shall not be less than 10 meters.

§ 84.04 Details of location of direction-indicating lights for fishing vessels, dredgers and vessels engaged in underwater operations.

- (a) The light indicating the direction of the outlying gear from a vessel engaged in fishing as prescribed in Rule 26(c)(ii) (33 CFR 83.26(c)(ii)) shall be placed at a horizontal distance of not less than 2 meters and not more than 6 meters away from the two all-round red and white lights. This light shall be placed not higher than the all-round white light prescribed in Rule 26(c)(i) (33 CFR 83.26(c)(i)) and not lower than the sidelights.
 - (b) The lights and shapes on a vessel engaged in

dredging or underwater operations to indicate the obstructed side and/or the side on which it is safe to pass, as prescribed in Rule 27(d)(i) and (ii) (33 CFR 83.27(d)(i) and (ii)), shall be placed at the maximum practical horizontal distance, but in no case less than 2 meters, from the lights or shapes prescribed in Rule 27(b)(i) and (ii) (33 CFR 83.27(b)(i) and (ii)). In no case shall the upper of these lights or shapes be at a greater height than the lower of the three lights or shapes prescribed in Rule 27(b)(i) and (ii).

§ 84.05 Screens.

- (a) The sidelights of vessels of 20 meters or more in length shall be fitted with mat black inboard screens and meet the requirements of § 84.09. On vessels of less than 20 meters in length, the sidelights, if necessary to meet the requirements of § 84.09, shall be fitted with mat black inboard screens. With a combined lantern, using a single vertical filament and a very narrow division between the green and red sections, external screens need not be fitted.
- (b) On power-driven vessels less than 12 meters in length constructed after July 31, 1983, the masthead light, or the all-round light described in Rule 23(d) (33 CFR

83.23(d)) shall be screened to prevent direct illumination of the vessel forward of the operator's position.

§ 84.06 Shapes.

- (a) Shapes shall be black and of the following sizes:
- (i) A ball shall have a diameter of not less than 0.6 meter;
- (ii) A cone shall have a base diameter of not less than 0.6 meter and a height equal to its diameter;
- (iii) A diamond shape shall consist of two cones (as defined in paragraph (a)(ii) of this section) having a common base.
- (b) The vertical distance between shapes shall be at least 1.5 meter.
- (c) In a vessel of less than 20 meters in length shapes of lesser dimensions but commensurate with the size of the vessel may be used and the distance apart may be correspondingly reduced.

§ 84.07 Color specification of lights.

(a) The chromaticity of all navigation lights shall conform to the following standards, which lie within the boundaries of the area of the diagram specified for each color by the International Commission on Illumination

- (CIE), in the "Colors of Light Signals", which is incorporated by reference. It is Publication CIE No. 2.2. (TC-1.6), 1975, and is available from the Illumination Engineering Society, 345 East 47th Street, New York, NY 10017 and is available for inspection at the Coast Guard, Ocean Engineering Division (CG-432), 2100 2nd St., SW., Stop 7901, Washington, DC 20593-7901. It is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html. This incorporation by reference was approved by the Director of the Federal Register.
- (b) The boundaries of the area for each color are given by indicating the corner co-ordinates, which are as follows:
 - (i) White:

x 0.525 0.525 0.452 0.310 0.310 0.443

y 0.382 0.440 0.440 0.348 0.283 0.382

(ii) Green:

x 0.028 0.009 0.300 0.203

y 0.385 0.723 0.511 0.356

(iii) Red:

x 0.680 0.660 0.735 0.721

y 0.320 0.320 0.265 0.259

(iv) Yellow:

x 0.612 0.618 0.575 0.575

y 0.382 0.382 0.425 0.406

§ 84.08 Intensity of lights.

(a) The minimum luminous intensity of lights shall be calculated by using the formula:

$$I = 3.43 \times 10^6 \times T \times D^2 \times K^{-D}$$

Where:

I is luminous intensity in candelas under service conditions,

T is threshold factor $2 \times 10^{-7} \text{lux}$.

D is range of visibility (luminous range) of the light in nautical miles,

K is atmospheric transmissivity. For prescribed lights the value of K shall be 0.8, corresponding to a meteorological visibility of approximately 13 nautical miles.

(b) A selection of figures derived from the formula is given in the following table:

Range of visibility (luminous range) of light in nautical miles D

Minimum luminous intensity of light in candelas for K=0.8 I

1	0.9
2	4.3
3	12
4	27
5	52
6	94

§ 84.09 Horizontal sectors.

- (a) (i) In the forward direction, sidelights as fitted on the vessel shall show the minimum required intensities. The intensities shall decrease to reach practical cut-off between 1 and 3 degrees outside the prescribed sectors.
- (ii) For sternlights and masthead lights and at 22.5 degrees abaft the beam for sidelights, the minimum required intensities shall be maintained over the arc of the horizon up to 5 degrees within the limits of the sectors prescribed in Rule 21 (33 CFR 83.21). From 5 degrees within the prescribed sectors the intensity may decrease by 50 percent up to the prescribed limits; it shall decrease steadily to reach practical cut-off at not more than 5 degrees outside the prescribed sectors.
- (b) All-round lights shall be so located as not to be obscured by masts, topmasts or structures within angular sectors of more than 6 degrees, except anchor lights prescribed in Rule 30 (33 CFR 83.30), which need not be

placed at an impracticable height above the hull, and the all-round white light described in Rule 23(e) (33 CFR 83.23(e)), which may not be obscured at all.

(c) If it is impracticable to comply with paragraph
(b) of this section by exhibiting only one all-round light,
two all-round lights shall be used suitably positioned or
screened to appear, as far as practicable, as one light at
a minimum distance of one nautical mile.

Note to paragraph (c) of this section: Tow unscreened all-round lights that are 1.28 meters apart or less will appear as one light to the naked eye at a distance of one nautical mile.

§ 84.10 Vertical sectors.

- (a) The vertical sectors of electric lights as fitted, with the exception of lights on sailing vessels underway and on unmanned barges, shall ensure that:
- (i) At least the required minimum intensity is maintained at all angles from 5 degrees above to 5 degrees below the horizontal;
- (ii) At least 60 percent of the required minimum intensity is maintained from 7.5 degrees above to 7.5 degrees below the horizontal.
 - (b) In the case of sailing vessels underway the

vertical sectors of electric lights as fitted shall ensure that:

- (i) At least the required minimum intensity is maintained at all angles from 5 degrees above to 5 degrees below the horizontal;
- (ii) At least 50 percent of the required minimum intensity is maintained from 25 degrees above to 25 degrees below the horizontal.
- (c) In the case of unmanned barges the minimum required intensity of electric lights as fitted shall be maintained on the horizontal.
- (d) In the case of lights other than electric lights these specifications shall be met as closely as possible

§ 84.11 Intensity of non-electric lights.

Non-electric lights shall so far as practicable comply with the minimum intensities, as specified in the Table given in § 84.08.

§ 84.12 Maneuvering light.

Notwithstanding the provisions of § 84.02(f), the maneuvering light described in Rule 34(b) (33 CFR 83.34(b)) shall be placed approximately in the same fore and aft vertical plane as the masthead light or lights and, where practicable, at a minimum height of one-half meter

vertically above the forward masthead light, provided that it shall be carried not less than one-half meter vertically above or below the after masthead light. On a vessel where only one masthead light is carried the maneuvering light, if fitted, shall be carried where it can best be seen, not less than one-half meter vertically apart from the masthead light.

§ 84.13 High-speed craft.

- (a) The masthead light of high-speed craft may be placed at a height related to the breadth of the craft lower than that prescribed in § 84.02(a)(i), provided that the base angle of the isosceles triangle formed by the sidelights and masthead light, when seen in end elevation, is not less than 27°.
- (b) On high-speed craft of 50 meters or more in length, the vertical separation between foremast and mainmast light of 4.5 meters required by § 84.02(k) may be modified provided that such distance shall not be less than the value determined by the following formula:

$$y = \frac{(a+17\Psi)C}{1000} + 2$$
;

where:

y is the height of the mainmast light above the

foremast light in meters;

- a is the height of the foremast light above the water surface in service condition in meters:
- Ψ is the trim in service condition in degrees;
- ${\cal C}$ is the horizontal separation of masthead lights in meters.

§ 84.14 Approval.

The construction of lights and shapes and the installation of lights on board the vessel must satisfy the Commandant, U.S. Coast Guard.

PART 85-ANNEX II: ADDITIONAL SIGNALS FOR FISHING VESSELS FISHING IN CLOSE PROXIMITY

3. The authority citation for part 85 is revised to read as follows:

Authority: 33 U.S.C. 2071.

- § 85.1 [Redesignated as § 85.01]
 - 4. Redesignate §85.1 as §85.01
- § 85.01 [Removed and Reserved]
 - 5. Remove and reserve newly redesignated §85.01.
- §§ 85.3 and 85.5 [Removed]
 - 6. Remove §§ 85.3 and 85.5.

7. Revise part 86 to read as follows:

PART 86-ANNEX III: TECHNICAL DETAILS OF SOUND SIGNAL APPLIANCES

Sec.

- § 86.01 Whistles.
- § 86.02 Bell or gong.
- § 86.03 Approval. [Reserved]

Authority: 33 U.S.C. 2071.

Section Contents

§ 86.01 Whistles

- (a) Frequencies and range of audibility. The fundamental frequency of the signal shall lie within the range 70-700Hz. The range of audibility of the signal from a whistle shall be determined by those frequencies, which may include the fundamental and/or one or more higher frequencies, which lie within the range 180-700Hz (+/-1%) for a vessel of 20 meters or more in length, or 180-2100Hz (+/-1%) for a vessel of less than 20 meters in length and which provide the sound pressure levels specified in paragraph (c) of this section.
- (b) Limits of fundamental frequencies. To ensure a wide variety of whistle characteristics, the fundamental frequency of a whistle shall be between the following limits:

- (i) 70-200 Hz, for a vessel 200 meters or more in length;
- (ii) 130-350 Hz, for a vessel 75 meters but less than 200 meters in length;
- (iii) 250-700 Hz, for a vessel less than 75 meters in length.
- (c) Sound signal intensity and range of audibility. A whistle fitted in a vessel shall provide, in the direction of maximum intensity of the whistle and at a distance of 1 meter from it, a sound pressure level in at least one 1/3rd-octave band within the range of frequencies 180-700Hz (+/-1%) for a vessel of 20 meters or more in length, or 180-2100Hz (+/-1%) for a vessel of less than 20 meters in length, of not less than the appropriate figure given in Table C of this section.

Table C

Length of	1/3 rd -octave band	Audibility range
vessel in	level at 1 meter in	in nautical miles
meters	dB referred to	
	$2 \times 10^{-5} \text{N/m}^2$	
200 or more	143	2
75 but less	138	1.5
than 200		
20 but less	130	1
than 75		
	120 ^{*1}	
Less than 20	115 ^{*2}	0.5
	111 ^{*3}	

^{*1} When the measured frequencies lie within the range 180-450Hz

- *2 When the measured frequencies lie within the range 450-800Hz
- *3 When the measured frequencies lie within the range 800-2100Hz
- (d) Directional properties. The sound pressure level of a directional whistle shall be not more than 4 dB below the sound pressure level, specified in paragraph (c) of this section, in any direction in the horizontal plane within ±45 degrees of the forward axis. The sound pressure level of the whistle in any other direction in the horizontal plane shall not be more than 10 dB less than the sound pressure level specified for the forward axis, so that the range of audibility in any direction will be at least half the range required on the forward axis. The sound pressure level shall be measured in that 1/3rd-octave band which determines the audibility range.
- (e) Positioning of whistles. (i) When a directional whistle is to be used as the only whistle on the vessel and is permanently installed, it shall be installed with its forward axis directed forward.
- (ii) A whistle shall be placed as high as practicable on a vessel, in order to reduce interception of the emitted sound by obstructions and also to minimize hearing damage risk to personnel. The sound pressure level of the vessel's

own signal at listening posts shall not exceed 110 dB(A) and so far as practicable should not exceed 100 dB(A).

- (f) Fitting of more than one whistle. If whistles are fitted at a distance apart of more than 100 meters, they shall not be sounded simultaneously.
- (g) <u>Combined whistle systems.</u> (i) A combined whistle system is a number of whistles (sound emitting sources) operated together. For the purposes of the Rules a combined whistle system is to be regarded as a single whistle.
 - (ii) The whistles of a combined system shall:
- (1) Be located at a distance apart of not more than100 meters,
 - (2) Be sounded simultaneously,
- (3) Each have a fundamental frequency different from those of the others by at least 10 Hz, and
- (4) Have a tonal characteristic appropriate for the length of vessel which shall be evidenced by at least two-thirds of the whistles in the combined system having fundamental frequencies falling within the limits prescribed in paragraph (b) of this section, or if there are only two whistles in the combined system, by the higher fundamental frequency falling within the limits prescribed in paragraph (b) of this section.

Note: If due to the presence of obstructions the sound field of a single whistle or of one of the whistles referred to in paragraph (f) of this section is likely to have a zone of greatly reduced signal level, a combined whistle system should be fitted so as to overcome this reduction.

(h) Towing vessel whistles. A power-driven vessel normally engaged in pushing ahead or towing alongside may, at all times, use a whistle whose characteristic falls within the limits prescribed by paragraph (b) of this section for the longest customary composite length of the vessel and its tow.

§ 86.02 Bell or gong.

- (a) Intensity of signal. A bell or gong, or other device having similar sound characteristics shall produce a sound pressure level of not less than 110 dB at 1 meter.
- (b) <u>Construction</u>. Bells and gongs shall be made of corrosion-resistant material and designed to give clear tone. The diameter of the mouth of the bell shall be not less than 300 mm for vessels of 20 meters or more in length. Where practicable, a power-driven bell striker is recommended to ensure constant force but manual operation

shall be possible. The mass of the striker shall be not less than 3 percent of the mass of the bell.

§ 86.03 Approval. [Reserved]

8. Revise part 87 to read as follows

PART 87-ANNEX IV: DISTRESS SIGNALS

Sec.

- § 87.01 Need of assistance.
- § 87.03 Exclusive use.
- § 87.05 Supplemental signals.

§ 87.01 Need of assistance.

The following signals, used or exhibited either together or separately, indicate distress and need of assistance:

- (a) A gun or other explosive signal fired at intervals of about a minute.
- (b) A continuous sounding with any fog-signaling apparatus;
- (c) Rockets or shells, throwing red stars fired one at a time at short intervals;
- (d) A signal made by any method consisting of the group . . . --- . . (SOS) in the Morse Code,

- (e) A signal sent by radiotelephony consisting of the spoken word "Mayday";
- (f) The International Code Signal of distress indicated by N.C.
- (g) A signal consisting of a square flag having above or below it a ball or anything resembling a ball;
- (h) Flames on the vessel (as from a burning tar barrel, oil barrel, etc.);
- (i) A rocket parachute flare or a hand flare showing a red light;
 - (j) A smoke signal giving off orange-colored smoke;
- (k) Slowly and repeatedly raising and lowering arms outstretched to each side;
- (1) A distress alert by means of digital selective calling (DSC) transmitted on:
 - (i) VHF channel 70, or
- (ii) MF/HF on the frequencies 2187.5 kHz, 8414.5 kHz, 4207.5 kHz, 6312 kHz, 12577 kHz or 16804.5 kHz;
- (m) A ship-to-shore distress alert transmitted by the ship's Inmarsat or other mobile satellite service provider ship earth station;
- (n) Signals transmitted by emergency positionindicating radio beacons;

- (o) Signals transmitted by radiocommunication systems, including survival craft radar transponders meeting the requirements of 47 CFR 80.1095.
- (p) A high intensity white light flashing at regular intervals from 50 to 70 times per minute.

§ 87.02 Exclusive use.

The use or exhibition of any of the foregoing signals except for the purpose of indicating distress and need of assistance and the use of other signals which may be confused with any of the above signals is prohibited.

§ 87.03 Supplemental signals.

Attention is drawn to the relevant sections of the
International Code of Signals, the International
Aeronautical and Maritime Search and Rescue Manual, Volume
III, the International Telecommunication Union Radio
Regulations and the following signals:

- (a) A piece of orange-colored canvas with either a black square and circle or other appropriate symbol (for identification from the air);
 - (b) A dye marker.

PART 88-ANNEX V: PILOT RULES

9. The Authority citation for part 88 continues to read as follows:

Authority: 33 U.S.C. 2071.

- § 88.01 [Removed and Reserved]
 - 10. Remove and reserve §88.01.
- §§ 88.03 through 88.15 [Removed]
 - 11. Remove §§88.03 through 88.15.

Dated: July 23, 2012

DANA A. GOWARD

Director of Marine Transportation Systems Management, U.S. Coast Guard.

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